North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
(701) 328-2750 • TTY 1-800-366-6888 or 711 • FAX (701) 328-3696 • http://swc.nd.gov

NOTICE OF MEETING

The North Dakota State Water Commission, a state agency, has scheduled a meeting on June 22, 2017, at 1:00 p.m., Central Daylight Time. The meeting will be held in the lower level conference room at the State Office Building, 900 East Boulevard Avenue, Bismarck, North Dakota.

At the time this notice is being prepared, the North Dakota State Water Commission anticipates the agenda of its meeting to include those topics as listed on the agenda. The discussion of agenda topics, where noted, may be held in executive session rather than during the portion of the meeting which is open to the public.

Date of Notice: *June 9, 2017*

Contact:

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To provide telephone accessibility to the State Water Commission meeting for those people who are deaf, hard of hearing, deaf and/or blind, and speech disabled, please contact Relay North Dakota, and reference ... TTY-Relay ND ... 1-800-366-6888, or 711.

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Meeting To Be Held At
State Office Building
900 East Boulevard Avenue
Lower Level Conference Room
Bismarck, North Dakota

June 22, 2017
1:00 P.M., CDT

PRELIMINARY AGENDA

A. Roll Call

B. Consideration of Agenda

C. Consideration of Draft Minutes of March 29, 2017 SWC Meeting **

D. State Water Commission Financial Reports:
- 1) Agency Program Budget Expenditures
- 2) 2015-2017 Biennium Resources Trust Fund and Water Development Trust Fund Revenues
- ***3) 2015-2017 Biennium Contract Fund Carryover*** **

E. 2017 Legislative Report:
- 1) Senate Bill 1020
- 2) Senator Curt Kreun - House Bill 1374

F. Consideration of Following Requests for State Cost Participation:
- ***1) City of Minot 2017 Levee Repair - $993,388*** **
- ***2) Haas Coulee Legal Drain, Phase II (Bottineau Co.) - $177,472*** **
- ***3) Buffalo Lodge Outlet (McHenry County) - $133,800*** **
- ***4) Walsh County Drain No. 22 Improvements - $266,086*** **
- ***5) Red River Basin Commission - $200,000*** **
- ***6) Assiniboine River Basin Initiative - $100,000*** **

G. Sheyenne River Valley Flood Control Program:
- ***1) City of Lisbon Permanent Flood Control Project, Levee F Construction - $3,800,000*** **

H. 2017-2018 Federal Municipal, Rural and Industrial Water Supply Funding:
- ***1) Northeast Regional Water District Expansion - $6,000,000*** **
- ***2) Southwest Pipeline Project - $4,000,000*** **

I. Mouse River Enhanced Flood Protection Project (MREFPP):
- 1) Project Update
- ***2) Ward County Property Acquisitions*** **

J. Southwest Pipeline Project:
   1) Project Update
   2) Contract 2-1B, Raw Water Transmission Line - Intake to Zap **

K. Fargo Moorhead Area Diversion Project Update

L. Garrison Diversion Conservancy District Report

M. Devils Lake Hydrologic and Projects Updates

N. Missouri River Update

O. Northwest Area Water Supply (NAWS) Project Update

P. Flood Protection Property Acquisition

Q. Temporary Water Use Update

R. Other Business

S. Adjournment

** ***BOLD, ITALICIZED ITEMS REQUIRE SWC ACTION***

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Agenda C

DRAFT FINAL

MINUTES

North Dakota State Water Commission
Bismarck, North Dakota

March 29, 2017

The North Dakota State Water Commission held a meeting at the State Office Building, Bismarck, North Dakota, on March 29, 2017. Governor Doug Burgum, Chairman, called the meeting to order at 1:00 p.m., and requested Garland Erbele, State Engineer, and Chief Engineer-Secretary to the State Water Commission, to call the roll. Governor Burgum announced a quorum was present.

STATE WATER COMMISSION MEMBERS PRESENT:
Governor Doug Burgum, Chairman
Doug Goehring, Commissioner, North Dakota Department of Agriculture, Bismarck
Arne Berg
Maurice Foley
Larry Hanson
George Nodland
Harley Swenson
Robert Thompson

STATE WATER COMMISSION MEMBER ABSENT:
Douglas Vosper

OTHERS PRESENT:
Garland Erbele, State Engineer, and Chief Engineer-Secretary,
North Dakota State Water Commission, Bismarck
State Water Commission Staff
Approximately 50 people interested in agenda items

The attendance register is on file with the official minutes.

The meeting was recorded to assist in compilation of the minutes.

CONSIDERATION OF AGENDA

The agenda for the March 29, 2017 State Water Commission meeting was presented; there were no modifications.

It was moved by Commissioner Berg, seconded by Commissioner Nodland, and unanimously carried, that the agenda be accepted as presented.

CONSIDERATION OF DRAFT MINUTES OF DECEMBER 9, 2016 STATE WATER COMMISSION MEETING - APPROVED

The draft final minutes of the December 9, 2016 State Water Commission meeting were approved by the following motion:

It was moved by Commissioner Foley and seconded by Commissioner Thompson that the draft final minutes of the December 9, 2016 State Water Commission meeting be approved as prepared. Because Governor Burgum took office as the 33rd Governor of North Dakota on December 15, 2016, which superseded the December 9, 2016 State Water Commission meeting, Governor Burgum requested voting abstention. Governor Burgum announced the motion carried.

STATE WATER COMMISSION - PROGRAM BUDGET EXPENDITURES AND CONTRACT FUND ALLOCATIONS, 2015-2017 BIENNIUM

In the 2015-2017 biennium, the State Water Commission has two line items - administrative and support services, and water and atmospheric resources expenditures. The allocated program expenditures for the period ending February 28, 2017 were presented and discussed by David Laschkewitsch, State Water Commission's Director of Administrative Services. The expenditures, in total, are within the authorized budget amounts. ***SEE APPENDIX "A"***

The Contract Fund for the 2015-2017 biennium, ***APPENDIX "B"***, provides information on the committed and uncommitted funds from the Resources Trust Fund and the Water Development Trust Fund. The current Contract Fund total allocation for projects is $881,250,642 with expenditures of $459,382,408. A balance of $143,757,484 remains available to commit to projects in the 2015-2017 biennium.

STATE WATER COMMISSION - RESOURCES TRUST FUND AND WATER DEVELOPMENT TRUST FUND REVENUES, 2015-2017 BIENNIUM

Oil extraction tax deposits into the Resources Trust Fund total $199,957,766 through February, 2017, and are currently $11,532,042 below originally budgeted revenues. A revised forecast projected the oil extraction revenue at the end of the 2015-2017 biennium will be short by $29,671,491.

Deposits into the Water Development Trust Fund (tobacco settlement) total $9,119,900 through February, 2017, and are currently $124,900, or 1.4 percent above budgeted revenues.

GRAND FORKS COUNTY LEGAL DRAIN NO. 58 - APPROVAL OF 45% STATE COST PARTICIPATION GRANT ($1,481,850) (SWC Project No. 2049)

A request from the Grand Forks County Water Resource District was presented for the State Water Commission's consideration for state cost participation for construction of the Grand Forks County Legal Drain No. 58 to reduce overland flooding in the city of Emerado and farmland south of the city due to an inadequate conveyance capacity of the natural waterway, the Hazen Brook.

The proposed project involves the construction of 5.5 miles of channel with a 15-foot bottom width and side slopes varying from 4:1 to 6:1. Drain permit application No. 4647 was received in the Office of the State Engineer on March 20, 2016, and is pending review. An assessment district has been established.

The project engineer's cost estimate is $3,790,600, of which $3,293,000 was determined eligible as a rural flood control project at 45 percent ($1,481,850). Final construction plans were completed in January, 2017, and bids for construction are anticipated to take place in the spring of 2017.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs not to exceed an allocation of $1,481,850 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Grand Forks County Water Resource District to support the Grand Forks County Legal Drain No. 58 project.

It was moved by Commissioner Goehring and seconded by Commissioner Berg that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs not to exceed an allocation of $1,481,850 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Grand Forks County Water Resource District to support the Grand Forks County Legal Drain No. 58 project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

McCLUSKY CANAL MILE MARKER 15 IRRIGATION PROJECT - APPROVAL OF STATE COST PARTICIPATION GRANT ($321,781) (SWC Project No. 1968)

The McClusky Canal is a 74-mile long canal designed to transport 1,950 cubic feet of water per second for the irrigation of 250,000 acres and provide water for municipal and rural systems. The Dakota Water Resources Act of 2000 authorizes approximately 24,000 acres of irrigation along the canal.

The Garrison Diversion Conservancy District has determined interest in an irrigation project which will serve a total irrigable acreage of approximately 550 acres located in McLean county near mile marker 15 and the city of Turtle Lake. The project engineer's estimated total cost is $1,274,477 for the water delivery system, of which $594,562 was determined eligible for state cost participation as an irrigation project at 50 percent ($297,281), and $70,000 was determined eligible as pre-construction engineering at 35 percent ($24,500), for a total state cost participation of $321,781. A request from the Garrison Diversion Conservancy District was presented for the State Water Commission's consideration for state cost participation in the amount of $321,781.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant as an irrigation project at 50 percent of the eligible costs for construction, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of $321,781 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Garrison Diversion Conservancy District to support the Mile Marker 15 Irrigation project.

It was moved by Commissioner Hanson and seconded by Commissioner Foley that the State Water Commission approve a state cost participation grant as an irrigation project at 50 percent of the eligible costs for construction, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of $321,781 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Garrison Diversion Conservancy District to support the Mile Marker 15 Irrigation project. This approval is contingent upon the availability of funds.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

HURDSFIELD LEGAL DRAIN (WELLS COUNTY) - APPROVAL OF STATE COST PARTICIPATION GRANT ($644,292) (SWC Project No. 1314)

A request from the Wells County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the construction of the Hurdsfield Legal Drain.

The proposed project is located northeast of the city of Hurdsfield. Local landowners, townships, and North Dakota Highway 200 are being impacted by flooding from a chain of lakes east of the city. The proposed project provides a gravity flow outlet to the James River. The Hurdsfield Area Drain Preliminary Engineering report was completed, and on June 11, 2015, the State Engineer approved an allocation of $35,000 for the pre-construction engineering. The assessment vote passed in favor of the project on March 9, 2017. Drain Permit No. 4842 and USACE NWP #21 have been approved.

The project engineer's cost estimate is $1,570,370, of which $1,335,671 was determined eligible as a rural flood control project at 45 percent ($601,052), and $223,544 was determined eligible as pre-construction engineering at 35 percent ($78,240), less $35,000 approved on June 11, 2015 ($43,240), for a total state cost participation of $644,292.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs for construction, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of $644,292 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Wells County Water Resource District to support the Hurdsfield Legal Drain project.

It was moved by Commissioner Berg and seconded by Commissioner Goehring that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs for construction, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of $644,292 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Wells County Water Resource District to support the Hurdsfield Legal Drain project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

RICHLAND SARGENT LEGAL DRAIN NO. 1 EXTENSION AND CHANNEL IMRPOVEMENTS, PHASE II - APPROVAL OF 45% ADDITIONAL STATE COST PARTICIPATION GRANT ($378,000) (SWC Project No. 1978)

On October 31, 2011, the State Water Commission adopted a motion approving a state cost participation grant of 45 percent of the eligible items, not to exceed an allocation of $245,250 from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020), to the Richland Sargent Joint Water Resource District to support the Richland Sargent Legal Drain No. 1 Extension and Channel Improvements project, Phase I. The project consisted of approximately 5 miles of construction of the drain extension channel which will improve the flow capacity of the channel. The existing channel has limited capacity causing frequent flooding.

The proposed Phase II project involves the construction of an additional 5 miles. The channel will be constructed with a maximum bottom width of 16 feet and 4:1 side slopes. Drain permit application No. 2031 was received in the Office of the State Engineer, and a U.S. Army Corps of Engineers Section 404 permit has been applied for; both applications are pending review. An assessment district is in existence.

The project engineer's cost estimate for Phase II is $1,000,000, of which $840,000 was determined eligible for state cost participation as a rural flood control project at 45 percent ($378,000). A request from the Richland Sargent Joint Water Resource District was presented for the State Water Commission's consideration for state cost participation in the amount of $378,000.

It was the recommendation of Secretary Erbele that the State Water Commission approve a 45 percent state cost participation grant of the eligible costs as a rural flood control project, not to exceed an additional allocation of $378,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Richland Sargent Joint Water Resource District to support the Richland Sargent Legal Drain No. 1 Extension and Channel Improvements project, Phase II.

It was moved by Commissioner Thompson and seconded by Commissioner Hanson that the State Water Commission approve a 45 percent state cost participation grant of the eligible costs as a rural flood control project, not to exceed an additional allocation of $378,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Richland Sargent Joint Water Resource District to support the Richland Sargent Legal Drain No. 1 Extension and Channel Improvements project, Phase II. This approval is contingent upon the availability of funds, a positive assessment vote, and satisfaction of the required permits.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

This approval increases the total state allocation grants to $623,250 to the Richland Sargent Joint Water Resource District to support the Richland Sargent Legal Drain No. 1 Extension and Channel Improvements, Phases I and II.

WALSH COUNTY DRAIN NO. 30-1 - APPROVAL OF STATE COST PARTICIPATION GRANT ($282,307) (SWC Project No. 1520)

A request from the Walsh County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the establishment of the Walsh County Drain No. 30-1 project that would provide agricultural drainage benefits for approximately 1,610 acres within Oakwood Township.

The proposed project would provide approximately a 5-year drainage capacity for the benefitted area through the construction of a channel providing an 8-foot bottom width and 3:1 side slopes. Culverts would be replaced with the appropriate size to facilitate a 5-year design capacity, as well as meet the applicable North Dakota stream crossing standards. Drain No. 30-1 would outlet into Walsh County Drain No. 30 and ultimately into the Park River in the NE1/4 of Section 14, Oakwood Township.

The project was discussed with the assessed landowners at a public informational meeting on November 15, 2016; the voters approved the assessment district. The U.S. Army Corps of Engineers permit has been secured for the project, and drain permit application No. 4923 was received in the Office of the State Engineer, which is pending review.

The project engineer's cost estimate is $707,972, of which $588,459 was determined eligible as a rural flood control project at 45 percent ($264,807), and $50,000 was determined eligible as pre-construction engineering at 35 percent ($17,500), for a total state cost participation of $282,307.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs for construction, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of $282,307 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Walsh County Water Resource District to support the Walsh County Drain No. 30-1 project.

It was moved by Commissioner Foley and seconded by Commissioner Berg that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs for construction, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of $282,307 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Walsh County Water Resource District to support the Walsh County Drain No. 30-1 project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

WALSH COUNTY DRAIN NO. 87/ MCLEOD DRAIN PROJECT - APPROVAL OF STATE COST PARTICIPATION GRANT ($5,273,586) (SWC Project No. 1520)

A request from the Walsh County Water Resource District was presented for the State Water Commission's consideration for state cost participation for the construction of the Walsh County Drain No. 87/McLeod Drain. The proposed project is located in rural Walsh county south of the city of Grafton, and will provide agricultural drainage benefits for approximately 34,000 acres.

Approximately 21 miles of drainage ditch would be excavated, along with changes in crossings as needed. The proposed improvements would outlet into the Park River in the NE1/4 of Section 16, Oakwood Township. The proposed project is being pursued concurrently with the City of Grafton Flood Control project to provide cost efficiencies for each project. The U.S. Army Corps of Engineers and the North Dakota Drainage Permit applications have been submitted, and are pending review.

The Commission staff's review and discussions with the project sponsor determined that construction of the proposed project would likely include two phases. Phase I would involve construction of the McLeod Drain, the Drain 87 outlet, and the portion of the McLeod Drain adjacent to the Grafton Flood Control project, which would be bid in 2017 with construction commencing in late 2017. Phase II would include the portion of the McLeod Drain west of the Grafton Flood Control project, its Highway 17 Lateral, and all of Drain 87 including its 67th Street Lateral, which would be bid and constructed in 2018. In order to accommodate coordination with the Grafton Flood Control project, the Phase I portion of the project was given priority consideration.

The project engineer's total cost estimate was $15,517,607. With construction related costs shared at 45 percent and pre-construction engineering costs at 35 percent, the total eligible state cost participation would be $5,273,586.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible construction costs for Phase I ($2,824,820), and a 35 percent grant of the eligible costs for pre-construction engineering for Phase II ($545,000), not to exceed a total allocation of $3,369,820 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Walsh County Water Resource District to support the Walsh County Drain 87/McLeod Drain project.

It was moved by Commissioner Berg and seconded by Commissioner Goehring that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs for construction of Phase I ($2,824,820), and a 35 percent grant of the eligible costs for pre-construction engineering for Phase II ($545,000), not to exceed a total allocation of $3,369,820 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Walsh County Water Resource District to support the Walsh County Drain 87/McLeod Drain project.

In discussion of the motion, representatives from the Walsh County Water Resource District expressed appreciation for the Commission's support, provided detailed information relating to their project, and requested the Commission's favorable consideration of their original request, which included a state cost participation grant of $5,273,586. The State Water Commission members deliberated the cost share participation at length and, as a result, the following amendment to the original motion was offered:

An amendment to the original motion was offered by Commissioner Swenson and seconded by Commissioner Thompson that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible construction costs, and 35 percent of the eligible cost for pre-construction engineering, not to exceed a total allocation of $5,273,586 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Walsh County Water Resource District to support the Walsh County Drain 87/McLeod Drain project, Phases I and II. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

Governor Burgum called the question on the amendment to the original motion and asked for a roll call vote.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the amendment to the original motion unanimously carried.

Governor Burgum called the question on the original motion, as amended, and asked for a roll call vote.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the original motion, as amended, unanimously carried.

EPPING DAM SPILLWAY RECONSTRUCTION (WILLIAMS COUNTY) - APPROVAL OF 75% ADDITIONAL STATE COST PARTICIPATION GRANT ($127,089) (SWC Project No. 346)

On March 9, 2016, the State Water Commission adopted a motion approving a state cost participation grant of 75 percent of the eligible items as a dam safety project, not to exceed an allocation of $719,045 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Williams County Water Resource District to support the Epping Dam spillway reconstruction project. Epping Dam was construction in 1935 and is regulated and inspected by the State Water Commission. The dam is located in Section 9, Township 155 North, Range 99 West, and is classified as a high hazard dam.

As a result of the inspection completed by the State Water Commission staff, an evaluation of the dam was recommended. The concrete chute spillway constructed in 1980 had significantly deteriorated with structural items being deficient and requiring replacement or repair for dam safety purposes. A December, 2013 engineering report documented these conditions and provided recommendations relative to the required repairs and corrective action to prevent additional future damages and increased risk of failure. The restoration work required a temporary but significant lowering of the reservoir levels which were coordinated with the North Dakota Game and Fish Department. This evaluation and design was completed in consultation with the State Water Commission and received previous cost share funding of $66,200.

The project engineer's total revised cost estimate was $1,128,179, which was determined eligible for state cost participation as a dam safety project at 75 percent ($846,134). A request from the Williams County Water Resource District was presented for the State Water Commission's consideration for an additional allocation of $127,089 ($846,134 eligible items, less $719,045 approved on March 9, 2016).

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant of 75 percent of the eligible costs as a dam safety project, not to exceed an additional allocation of $127,089 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the William County Water Resource District to support the Epping Dam spillway reconstruction project.

It was moved by Commissioner Hanson and seconded by Commissioner Foley that the State Water Commission approve a state cost participation grant of 75 percent of the eligible costs as a dam safety project, not to exceed an additional allocation of $127,089 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the William County Water Resource District to support the Epping Dam spillway reconstruction project. This approval is contingent upon the availability of funds.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

This approval increases the total state allocation grants to $846,134 to the Williams County Water Resource District to support the Epping Dam spillway reconstruction project.

CASS COUNTY DRAIN NO. 14 CHANNEL IMPROVEMENTS - APPROVAL OF STATE COST PARTICIPATION GRANT ($741,562) (SWC Project No. 1070)

A request from the Maple River Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Cass County Drain No. 14 channel improvements project, which is an existing legal drain that runs from the city of Davenport to the Maple River north of the city of West Fargo and intercepts drainage from Cass County Drains Nos. 34, 35, 36, 60, and Cass-Richland County Drain No. 1.

Improvements will address significant slope failures and inadequate channel depth on approximately 4.2 miles of the existing Cass County Drain 14 between Cass County Highway 6 and Cass County Highway 16 north of the city of Davenport. The project will include flattening the side slopes to improve the stability of the channel slopes and improve the capacity of the existing drain, in addition to flattening and deepening the channel profile to reduce velocities and provide adequate depth for the drainage from adjacent fields. The project will include 3 culvert crossings and a sheet pile drop structure. These improvements will reduce damages to adjacent agricultural lands and roads and provide for additional drainage capacity to Cass County Drain No. 14.

The project engineer's cost estimate was $2,065,700, of which $1,507,138 was determined eligible as a rural flood control project at 45 percent for construction ($678,212), and $181,000 was determined eligible as pre-construction engineering at 35 percent ($63,350), for a total state cost participation of $741,562.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs for construction, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of $741,562 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Maple River Water Resource District to support the Cass County Drain No. 14 channel improvements project.

It was moved by Commissioner Thompson and seconded by Commissioner Berg that the State Water Commission approve a state cost participation grant as a rural flood control project at 45 percent of the eligible costs for construction, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of $741,562 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Maple River Water Resource District to support the Cass County Drain No. 14 channel improvements project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

SHEYENNE-MAPLE FLOOD CONTROL DISTRICT 2 IMPROVEMENTS - APPROVAL OF STATE COST PARTICIPATION GRANT ($1,035,358) (SWC Project No. 2096)

A request from the Southeast Cass Water Resource District was presented for the State Water Commission's consideration for state cost participation for the Sheyenne-Maple Flood Control District 2 Improvements project located in the city of West Fargo, Cass county.

The District completed the preliminary design of the project consisting of an improvement to one mile of the channel bottom in the Sheyenne River diversion, which has an existing assessment district. The purpose of the project is to armor the channel bottom within a portion of the Sheyenne River Diversion to prevent further deterioration due to frequent and extended use. A construction permit application was submitted to the Office of the State Engineer on February 24, 2017, which is pending review. It is anticipated the project could be bid in the summer of 2017, with the project substantially completed in the fall of 2017.

The project engineer's cost estimate was $1,790,000, of which $1,652,093 was determined eligible for construction of a flood control project at 60 percent ($991,256), and $126,007 was determined eligible as pre-construction engineering at 35 percent ($44,102), for a total state cost participation of $1,035,358.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant as a flood control project at 60 percent of the eligible costs for construction, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of $1,035,358 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Southeast Cass Water Resource District to support the Sheyenne-Maple Flood Control District 2 Improvements project.

It was moved by Commissioner Berg and seconded by Commissioner Goehring that the State Water Commission approve a state cost participation grant as a flood control project at 60 percent of the eligible costs for construction, and 35 percent of the eligible costs for pre-construction engineering, not to exceed a total allocation of $1,035,358 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Southeast Cass Water Resource District to support the Sheyenne-Maple Flood Control District 2 Improvements project. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

SHEYENNE RIVER VALLEY FLOOD PROTECTION PROGRAM - CITY OF LISBON PERMANENT FLOOD CONTROL PROJECT, CONSTRUCTION OF PHASE I - LEVEE D PROJECT - APPROVAL OF ADDTIONAL STATE COST PARTICIPATION GRANTS ($3,600,000) (SWC Project Nos. 1991-08 and 1991-09)

On June 19, 2013, the State Water Commission adopted a motion approving a state cost participation grant of 90 percent not to exceed an allocation of $700,650 from the funds appropriated to the State Water Commission in 2011 Senate Bill 2371 for the Sheyenne River Valley Flood Protection Program to assist the city of Lisbon with their preliminary engineering design and legal costs associated with the development of a permanent flood control project, Phase I - Levee C. The basis for granting this exception to the Commission's cost share policy included multiple years of flooding that the city has experienced, their limited ability to pay due to recurring flood recovery efforts, and potential impacts from Devils Lake releases.

Previous state cost participation funding approvals include:

On May 29, 2014, the State Water Commission adopted a motion approving a total state cost participation grant of 80 percent not to exceed an allocation of $1,238,698 (60 percent of the eligible costs as a flood control project - $929,023; and 20 percent of the eligible costs to mitigate the flood risk from the Devils Lake outlets - $309,675), from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), and a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund in the amount of $536,302 for the remaining costs to the city of Lisbon to support its permanent flood protection project, Phase I - Levee A floodwall. Project estimated cost of $1,775,000.

On September 15, 2014, the State Water Commission adopted a motion approving a total state cost participation grant of 80 percent not to exceed an additional allocation of $680,000 (60 percent of the eligible costs as a flood control project - $510,000; and 20 percent of the eligible costs to mitigate the flood risk from the Devils Lake outlets - $170,000), from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), and a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund in the amount of $170,000 to the city of Lisbon to support its permanent flood protection project, Phase I - Levee A floodwall.

On March 11, 2015, the State Water Commission adopted a motion approving a total state cost participation grant of 80 percent not to exceed an additional allocation of $3,166,000 (60 percent of the eligible costs as a flood control project - $2,375,500; and 20 percent of the eligible costs to mitigate the flood risk from the Devils Lake outlets - $791,500), from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), and a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund in the amount of $886,500 of the remaining costs to the city of Lisbon to support its permanent flood protection project, Phase I, Levee C.

On May 20, 2015, the State Water Commission adopted a motion to approve a state cost participation grant of 90 percent not to exceed an additional allocation of $142,200 (90 percent of the eligible costs ($842,850) less $700,650 approved June 19, 2013 for Phase I - Levee C) from the funds appropriated to the State Water Commission in the 2013-2015 biennium (H.B. 1020), for the Sheyenne River Valley Flood Protection Program to the city of Lisbon, Phase I - Levee E to assist in the engineering and legal services.

On March 9, 2016, the State Water Commission adopted a motion approving a total state cost participation grant of 80 percent not to exceed an additional allocation of $2,098,000 (60 percent of the eligible costs as a flood control project - $1,573,500; and 20 percent of the eligible costs to mitigate the flood risk from the Devils Lake outlets - $524,500), from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), and a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund in the amount of $527,000 of the remaining costs to the city of Lisbon to support its permanent flood protection project, Phase I - Levee E. Project estimated cost of $2,625,000.

On July 6, 2016, the State Water Commission adopted a motion approving a total state cost participation grant of 90 percent not to exceed an additional allocation of $2,188,800 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020); and a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund in the amount of $243,200 for the Sheyenne River Valley Flood Protection Program to the city of Lisbon to support its permanent flood protection project, preliminary engineering and legal services, Levee D and Levee F.

A request from the city of Lisbon was presented for the State Water Commission's consideration for state cost participation for the construction of Phase I - Levee D project. The proposed project will be constructed in the northern portion of the city and will include approximately 1,200 linear feet of earthen levee, 585 linear feet of concrete floodwall, and 64 linear feet of removable stop logs. This levee will provide flood protection to homes and the city's infrastructure. The

project engineer's estimated cost is $4,500,000, which is eligible for state cost participation at 60 percent of the eligible costs as a flood control project ($2,700,000). The city of Lisbon also requested a 30-year loan with an interest rate of 1.5 percent from the State Water Commission's Infrastructure Revolving Loan Fund for the remaining costs of $900,000.

It was the recommendation of Secretary Erbele that the State Water Commission: 1) approve a state cost participation grant as a flood control project at 60 percent of the eligible costs ($2,700,000); and 2) provide an exception from its current cost share policy to approve an additional state cost participation grant of 20 percent of the eligible costs ($900,000) to mitigate the flood risk from the Devils Lake outlets, which would provide a total state cost participation grant of 80 percent not to exceed a total additional allocation of $3,600,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the city of Lisbon for construction of its permanent flood protection project, Phase I - Levee D. The city of Lisbon representatives were informed that because of the current legislation capping the State Water Commission's Infrastructure Revolving Loan Fund at $25,000,000 for the 2017-2019 biennium, no additional loan money would be available at this time.

It was moved by Commissioner Berg and seconded by Commissioner Nodland that the State Water Commission:

1) approve a state cost participation grant as a flood control project at 60 percent of the eligible costs ($2,700,000); and

2) approve a state cost participation grant to mitigate the flood risk from the Devils Lake outlets at 20 percent of the eligible costs ($900,000).

The above approvals include total state cost participation grants of 80 percent not to exceed a total allocation of $3,600,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020) to the city of Lisbon for construction of its permanent flood protection project, Phase I - Levee D.

These approvals are contingent upon the availability of funds, and satisfaction of the required permits.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

The total state cost participation and loan summaries for the Sheyenne River Valley Flood Protection Program, city of Lisbon include to date:

Levee A:
60 percent state cost participation grant for construction - $929,023; 20 percent state cost participation grant - $309,675 to mitigate flood risk from the Devils Lake outlets; and a loan of $536,302 from the State Water Commission's Infrastructure Revolving Loan Fund (approved May 29, 2014)

60 percent state cost participation grant for construction - $510,000; 20 percent state cost participation grant - $170,000 to mitigate flood risk from the Devils Lake outlets; and a loan of $170,000 from the State Water Commission's Infrastructure Revolving Loan Fund (approved September 15, 2014)

Levee C:
90 percent state cost participation grant for preliminary engineering design and legal services - $700,650 (approved June 19, 2013)

60 percent state cost participation grant for construction - $2,375,500; 20 percent state cost participation grant - $791,500; and loan of $886,500 from the State Water Commission's Infrastructure Revolving Loan Fund (approved May 20, 2015)

Levee D:
60 percent state cost participation grant for Phase I construction - $2,700,000; and 20 percent state cost participation grant ($900,000) to mitigate flood risk from the Devils Lake outlets (approved March 29, 2017)

Levee D and Levee F:
90 percent state cost participation for preliminary engineering design and legal services - $2,188,800); and loan of $243,200 from State Water Commission's Infrastructure Revolving Loan Fund (approved July 6, 2016)

Levee E:
90 percent state cost participation grant for preliminary engineering design and legal services - $842,850 (approved May 20, 2015)

60 percent state cost participation grant for construction - $1,573,500; 20 percent state cost participation grant - $524,500 to mitigate flood risk from the Devils Lake outlets; and loan of $527,000 from State Water Commission's Infrastructure Revolving Loan Fund (approved March 9, 2016)

SPIRITWOOD AIRBORNE ELECTROMAGNETIC SURVEY 2016 (SWC Project No. 1395)

Jon Patch and Dave Hisz, State Water Commission Water Appropriation Division, provided a technical presentation on the Spiritwood Airborne Electromagnetic Survey 2016 (AEM). The contract was awarded to GEOTECH (Canada) in October, 2016. The data collection survey objectives included: 1) delineate geometry of the Spiritwood aquifer; 2) identify deep channel segments; and 3) define areas of decreased conductivity. The final data was delivered in January, 2017. The power point presentation is attached as ***APPENDIX "C".***

FARGO MOORHEAD AREA DIVERSION PROJECT REPORT (SWC Project No. 1928)

Tim Mahoney, Fargo Mayor, provided updates on the local, state and federal efforts currently underway relating to the Fargo Moorhead Area Diversion project. A summary of the presentation is included herewith as ***APPENDIX "D".***

MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT UPDATE (SWC Project No. 1974)

The Mouse River Enhanced Flood Protection project status report was provided, which is detailed in the staff memorandum dated March 8, 2017, and included as ***APPENDIX "E"***. Chuck Barney, city of Minot Mayor, and Ryan Ackerman, Ackerman-Estvold Engineering and Souris River Joint Board Administrator, provided detailed project information, and expressed appreciation for the State Water Commission's support.

MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT - PHASE MI-1A, BROADWAY PUMP STATION - APPROVAL OF 65% STATE COST PARTICIPATION GRANT ($15,197,000) (SWC Project No. 1974)

The Mouse River Enhanced Flood Protection Project includes basin-wide flood risk reduction features in four North Dakota counties bisected by the Mouse River. Phase MI-1A, Broadway pump station, includes the construction of a storm water pump station with a capacity of approximately 178,000 gallons per minute, which is designed to convey interior drainage from a large portion of north Minot. This project can progress independently from adjacent phases as it does not have a nexus with the federal government. The proposed approach to the project will not impact the existing federal project, therefore, Section 408 permission is not required. Additionally, the project will not impact the Mouse River, wetlands or other waters of the United States, therefore, a Section 404 permit is not required. The project has undergone extensive review by the Souris River Joint Board, the city of Minot, the U.S. Army Corps of Engineers, FEMA, and an independent external peer review and safety assurance review by an independent engineering consultant.

The project engineer's estimate of cost for Phase MI-1A, construction of the Broadway pump station was $23,380,000, which is eligible for state cost participation. A request from the Souris River Joint Board was presented for the State Water Commission's consideration for a 65 percent state cost participation grant of the eligible costs ($15,197,000).

It was the recommendation of Secretary Erbele that the State Water Commission approve a 65 percent state cost participation grant as a flood control project not to exceed an allocation of $15,197,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Souris River Joint Board to support the Mouse River Enhanced Flood Protection Project, Phase MI-1A, construction of the Broadway pump station.

It was moved by Commissioner Foley and seconded by Commissioner Berg that the State Water Commission approve a 65 percent state cost participation grant as a flood control project not to exceed an allocation of $15,197,000 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Souris River Joint Board to support the Mouse River Enhanced Flood Protection Project, Phase MI-1A, construction of the Broadway pump station. This approval is contingent upon the availability of funds, and satisfaction of the required permits.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT - PHASE MI-2C, PETERSON COULEE OUTLET - APPROVAL OF 65% STATE COST PARTICIPATION GRANT ($1,427,022) (SWC Project No. 1974)

The Mouse River Enhanced Flood Protection Project includes basin-wide flood risk reduction features in four North Dakota counties bisected by the Mouse River. Phase MI-2C, Peterson Coulee Outlet, includes the construction of interior improvements associated with Phase MI-2 (Napa Valley levees) of the project. An analysis of the interior drainage was completed commensurate with the design of MI-2 of the Mouse River Plan. Various alternatives to address the interior drainage were considered; the most cost effective and lowest risk alternative was determined to divert the storm water around the levee and construct a pump station adjacent to the levee to handle local runoff and seepage flows. This sub-phase of the project is proceeding ahead of the issuance of the Record of Decision because it will provide an independent utility by reducing flood risk due to interior drainage. The project has undergone extensive review by the Souris River Joint Board, the city of Minot, the U.S. Army Corps of Engineers, FEMA, and an independent external peer review and a safety assurance review by an independent engineering consultant.

The project engineer's total cost estimate was $2,195,418, which was determined eligible for state cost participation. A request from the Souris River Joint Board was presented for the State Water Commission's consideration for a 65 percent state cost participation grant of the eligible costs ($1,427,022).

It was the recommendation of Secretary Erbele that the State Water Commission approve a 65 percent state cost participation grant as a flood control project not to exceed an allocation of $1,427,022 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Souris River Joint Board to support the Mouse River Enhanced Flood Protection Project, Phase MI-2C, construction of the Peterson Coulee outlet.

It was moved by Commissioner Foley and seconded by Commissioner Thompson that the State Water Commission approve a 65 percent state cost participation grant as a flood control project not to exceed an allocation of $1,427,022 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Souris River Joint Board to support the Mouse River Enhanced Flood Protection Project, Phase MI-2C, construction of the Peterson Coulee Outlet. This approval is contingent upon the availability of funds.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT - PHASE BU-1 (BURLINGTON LEVEE) AND PHASE MI-5 (NORTHEAST MINOT TIEBACK LEVEE) INDEPENDENT EXTERNAL PEER REVIEW - APPROVAL OF 65% STATE COST PARTICIPATION GRANT ($171,909) (SWC Project No. 1974)

The Mouse River Enhanced Flood Protection Project includes basin-wide flood risk features in four North Dakota counties bisected by the Mouse River. The State Water Commission previously approved cost share participation for the pre-construction engineering of Phase BU-1 (Burlington Levee) and Phase MI-5 (Northeast Minot Tieback Levee) on October 12, 2016 not to exceed an allocation of $3,900,000. In accordance with the U.S. Army Corps of Engineers policy for flood risk management projects, the project designs must be subjected to an independent external peer review and safety assurance review. The Souris River Joint Board had previously procured the services of a consulting firm to perform these tasks.

The project engineer's total cost estimate was $264,475 for providing the independent external peer review services, which was determined eligible for state cost participation. A request from the Souris River Joint Board was presented for the State Water Commission's consideration for a 65 percent state cost participation grant of the eligible costs ($171,909).

It was the recommendation of Secretary Erbele that the State Water Commission approve a 65 percent state cost participation grant as a flood control project not to exceed an allocation of $171,909 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Souris River Joint Board to support the Mouse River Enhanced Flood Protection Project, Phase BU-1 (Burlington Levee) and Phase MI-5 (Northeast Minot Tieback Levee) independent external peer review.

It was moved by Commissioner Goehring and seconded by Commissioner Nodland that the State Water Commission approve a 65 percent state cost participation grant as a flood control project not to exceed an allocation of $171,909 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020), to the Souris River Joint Board to support the Mouse River Enhanced Flood Protection Project, Phase BU-1 (Burlington Levee) and Phase MI-5 (Northeast Minot Tieback Levee) independent external peer review. This approval is contingent upon the availability of funds.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

MOUSE RIVER ENHANCED FLOOD PROTECTION PROJECT - CITY OF MINOT PROPERTY ACQUISITIONS - APPROVAL OF 75% STATE COST PARTICIPATION GRANT ($3,979,656) (SWC Project No. 1974)

The Mouse River Enhanced Flood Protection Project includes basin-wide flood risk reduction features in four North Dakota counties bisected by the Mouse River. The city of Minot has been responsible for acquiring properties within the anticipated footprint of the project within the city limits of Minot. The funding needs for property acquisitions are in excess of the current funding available; the unobligated funding in the 2015-2017 biennium appropriation for the Mouse River flood control activities is $20,775,587. Cost share participation requests previously approved by the State Water Commission on March 29, 2017 total $16,795,931, leaving $3,979,656 unobligated in the 2015-2017 biennium for the Mouse River Enhanced Flood Protection Project. A request from the

Souris River Joint Board was presented for the State Water Commission's consideration for a 75 percent state cost participation grant of the eligible costs ($3,979,656) for property acquisitions within the city of Minot as identified in the city's acquisition plan currently on file at the State Water Commission.

It was the recommendation of Secretary Erbele that the State Water Commission approve a state cost participation grant at 75 percent of the eligible costs, not to exceed an allocation of $3,979,656 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020) to the Souris River Joint Board to support the Mouse River Enhanced Flood Protection Project, city of Minot property acquisition plan.

The process for properties acquisition buyouts was discussed at length, and some of the Commission members questioned the appraisal valuation guidelines for determining the final buyout expenditure. As a result of the discussion, Governor Burgum requested the Secretary to the State Water Commission and the staff provide statewide property acquisition buyout information specifically relating to the appraisal valuation and the purchase price. Governor Burgum stated that a clarification of the property acquisition guidelines and the process would provide valuable assistance to both the local sponsors and to the State Water Commission members when considering informed decisions.

It was moved by Commissioner Berg and seconded by Commissioner Thompson that the State Water Commission approve a state cost participation grant at 75 percent of the eligible costs, not to exceed an allocation of $3,979,656 from the funds appropriated to the State Water Commission in the 2015-2017 biennium (S.B. 2020) to the Souris River Joint Board to support the Mouse River Enhanced Flood Protection Project, city of Minot property acquisition plan. This approval is contingent upon the availability of funds.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

SOUTHWEST PIPELINE PROJECT - PROJECT UPDATE (SWC Project No. 1736-99)

The Southwest Pipeline Project update was presented, which is detailed in the staff memorandum dated March 1, 2017 and included as ***APPENDIX "F"***.

SOUTHWEST PIPELINE PROJECT - APPROVAL OF EXPENDITURES REIMBURSEMENT FROM RESERVE FUND FOR REPLACEMENT AND EXTRAORDINARY MAINTENANCE ($924,579.42); AND APPROVAL TO INCREASE ELIGIBILITY CRITERIA FOR EXPENDITURE FROM REM FUNDS TO $20,000 (SWC Project No. 1736-99)

The Southwest Water Authority collects and maintains a reserve fund for "replacement and extraordinary maintenance". This fund, which is required by authorizing legislation, exists to fund replacement and maintenance of items that exceed annual budgeted amounts. Expenditures from this fund are to be authorized by the State Water Commission.

A request from the Southwest Water Authority was presented for the State Water Commission's consideration for reimbursement of expenditures from the replacement and extraordinary maintenance fund that includes the variable frequency drive at the Jung Lake pump station ($55,488.50); balance reimbursement on electrical service at the water treatment plant at Dickinson ($13,877.80); replacement contactors at the intake pump station ($80,433.89); motor reconditioning at the intake pump station ($39,865.52); pipeline relocations at the right-of-way ($94,928); vent repair and relocation at the six-million gallon reservoir at the water treatment plant at Dickinson ($33,887); repair of a service line ($30,420); replacement of stream traps and steam unit heaters at the water treatment plant at Dickinson ($15,326.53); pipeline relocation at the BNSF railroad crossing ($163,533.36); repair to a PRV vault ($19,207.04); and replacement of a section of Contract 2-3E pipeline ($377,611.78). The total cost for all of the items requested for reimbursement from the replacement and extraordinary maintenance fund is $924,579.42.

The current eligibility criterion for authorizing expenditure from the REM funds is a single event which has a repair or replacement cost of $10,000 or more. This criterion was set by the State Water Commission on June 19, 1996. The 1996 memorandum indicated that staff time, lost water, and vehicle replacement would not be included in the amount eligible. On August 13, 1998, the State Water Commission agreed to include staff time for reimbursement from REM funds. An adjustment of the eligibility criterion, based on the Consumer Price Index (CPI) change from June, 1996 to January, 2017, would result in increasing the $10,000 limit to $15,500. In an effort for future planning purposes, it was recommended that the eligibility criteria for expenditure from REM funds be increased to $20,000 for a single event, effective in the 2018 Southwest Water Authority budget.

It was the recommendation of Secretary Erbele that the State Water Commission approve the reimbursement of expenditures from the reserve fund for replacement and extraordinary maintenance not to exceed $924,579.42. The Southwest Water Authority adopted similar action at its December 6, 2016 and February 6, 2017 meetings.

It was also the recommendation of Secretary Erbele that the State Water Commission approve an increase in the eligibility criterion for the expenditures from REM funds from $10,000 to $20,000 for a single event, effective in the 2018 Southwest Water Authority budget.

It was moved by Commissioner Nodland and seconded by Commissioner Goehring that the State Water Commission:

1) approve the reimbursement of expenditures from the reserve fund for replacement and extraordinary maintenance not to exceed $924,579.42; and

2) approve an increase in the eligibility criterion for the expenditures from the reserve fund for replacement and extraordinary maintenance from $10,000 to $20,000 for a single event, effective in the 2018 Southwest Water Authority budget.

Commissioners Berg, Foley, Goehring, Hanson, Nodland, Swenson, Thompson, and Governor Burgum voted aye. There were no nay votes. Governor Burgum announced the motion unanimously carried.

NORTHWEST AREA WATER SUPPLY (NAWS) PROJECT UPDATE (SWC Project No. 237-04)

The Northwest Area Water Supply (NAWS) project update was provided, which is detailed in the staff memorandum dated March 6, 2017, and included as ***APPENDIX "G"***.

GARRISON DIVERSION CONSERVANCY DISTRICT (SWC Project No. 237)

Duane DeKrey, Garrison Diversion Conservancy District, general manager, provided a status report on the District's activities relating to the Red River Valley Water Supply project, operations and maintenance efforts, and funding for the 2017-2019 biennium.

DEVILS LAKE HYDROLOGIC AND PROJECT UPDATES (SWC Project No. 416-10)

The Devils Lake hydrologic report and project updates are detailed in the staff memorandum dated March 10, 2017, and included as ***APPENDIX "H".***

MISSOURI RIVER REPORT (SWC Project No. 1392)

The Missouri River report was provided, which is detailed in the staff memorandum dated March 10, 2017, and included as ***APPENDIX "I"***.

2017 SPRING FLOOD OUTLOOK (SWC Project No. 1431)

The 2017 spring flood outlook was provided, which is detailed in the staff memorandum dated March 10, 2017, and included as ***APPENDIX "J".***

Governor Burgum offered data collection comments relating to surface water information/models and to the Spiritwood Airborne Electromagnetic Survey of 2016 presentation of this date. In summary, Governor Burgum encouraged the Secretary to the State Water Commission and the staff to make conscious efforts to effectively improve the means of how significant data collection is acquired and to a greater degree. He emphasized the importance that with the technology that is available, "we all need to do a better job of data collection."

2017 SIXTY-FIFTH LEGISLATIVE ASSEMBLY OF NORTH DAKOTA

The State Water Commission staff provided a legislative summary relative to bills considered in the 017 Sixty-Fifth Legislative Assembly of North Dakota having a direct impact on water issues. H.B.1020, the State Water Commission's appropriation bill, was heard before the Education and Environment Division of the House Appropriations Committee on January 10, 2017; and is scheduled to be heard before the Senate Appropriations Committee on March 16, 2017. H.B. 1374 relates to the composition and operation of the State Water Commission. S.B. 2134 sets up a process to define the ordinary high water mark of the historic Missouri River channel as it existed before the Garrison Dam - the bill directs the adjustment of state-leased mineral acres and authorizes refunds to the original owners. S.B. 2047 relates to quick take eminent domain.

There being no further business to come before the State Water Commission, Governor Burgum adjourned the March 29, 2017 meeting at 5:10 p.m.

NORTH DAKOTA STATE WATER COMMISSION
MANAGING WATER RESOURCES OF THE STATE
for the BENEFIT of its PEOPLE
1937

_____

Doug Burgum, Governor
Chairman, State Water Commission

_____

Garland Erbele, P.E.
North Dakota State Engineer,
and Chief Engineer-Secretary
to the State Water Commission

APPENDIX "A"
MARCH 29, 2017

STATE WATER COMMISSION
ALLOCATED PROGRAM EXPENDITURES
FOR THE PERIOD ENDED FEBRUARY 28, 2017
BIENNIUM COMPLETE: 83%

PROGRAM	SALARIES/ BENEFITS	OPERATING EXPENSES	GRANTS & CONTRACTS	15-Mar-17 PROGRAM TOTALS
ADMINISTRATION				
Allocated	2,729,489	2,806,129		5,535,618
Expended	2,230,214	1,438,348		3,668,562
Percent	82%	51%		66%
			General Fund:	0
			Federal Fund:	72,995
			Special Fund:	3,595,567
PLANNING AND EDUCATION				
Allocated	1,472,573	352,990		1,825,563
Expended	1,219,430	184,710		1,404,141
Percent	83%	52%		77%
			General Fund:	0
			Federal Fund:	214,717
			Special Fund:	1,189,424
WATER APPROPRIATION				
Allocated	5,762,691	1,185,300	1,372,844	8,320,835
Expended	4,536,322	554,999	824,031	5,915,352
Percent	79%	47%	60%	71%
			General Fund:	0
			Federal Fund:	59,429
			Special Fund:	5,855,923
WATER DEVELOPMENT				
Allocated	4,713,717	10,742,500	1,562,500	17,018,717
Expended	3,696,865	6,899,742	800,803	11,397,410
Percent	78%	64%	51%	67%
			General Fund:	0
			Federal Fund:	169,931
			Special Fund:	11,227,479
STATEWIDE WATER PROJECTS				
Allocated			959,003,567	959,003,567
Expended			379,776,657	379,776,657
Percent			40%	40%
			General Fund:	0
			Federal Fund:	0
			Special Fund:	379,776,657
REGULATORY DIVISION				
Allocated	2,828,565	2,947,500	15,000	5,791,065
Expended	1,927,452	1,076,937	0	3,004,389
Percent	68%	37%	0%	52%
			General Fund:	0
			Federal Fund:	1,265,678
			Special Fund:	1,738,712
ATMOSPHERIC RESOURCE				
Allocated	1,107,158	743,382	4,885,212	6,735,752
Expended	858,624	308,421	1,371,417	2,538,462
Percent	78%	41%	28%	38%
			General Fund:	0
			Federal Fund:	0
			Special Fund:	2,538,462
SOUTHWEST PIPELINE				
Allocated	512,995	10,461,744	97,502,498	108,477,237
Expended	528,533	8,545,094	49,215,679	58,289,306
Percent	103%	82%	50%	54%
			General Fund:	0
			Federal Fund:	3,000,000
			Special Fund:	55,289,306
NORTHWEST AREA WATER SUPPLY				
Allocated	705,632	13,910,277	31,611,573	46,227,482
Expended	498,757	3,235,076	1,219,052	4,952,885
Percent	71%	23%	4%	11%
			General Fund:	0
			Federal Fund:	0
			Special Fund:	4,952,885
PROGRAM TOTALS				
Allocated	19,832,820	43,149,822	1,095,953,194	1,158,935,836
Expended	15,496,197	22,243,328	433,207,639	470,947,163
Percent	78%	52%	40%	41%

STATE WATER COMMISSION
PROJECT SUMMARY
2015-2017 BIENNIUM

Feb-17

	BUDGET	SWC/SE APPROVED	OBLIGATIONS EXPENDITURES	REMAINING UNOBLIGATED	REMAINING UNPAID
FLOOD CONTROL					
FARGO	228,506,200	228,506,200	141,210,942	0	87,295,258
GRAFTON	33,925,000	33,925,000	1,534,675	0	32,390,325
MOUSE RIVER FLOOD CONTROL	46,513,397	25,737,810	9,550,023	20,775,587	16,187,787
VALLEY CITY	28,458,354	27,312,537	9,104,144	1,145,817	18,208,393
LISBON	15,227,187	8,094,752	4,941,048	7,132,435	3,153,704
FORT RANSOM	225,000	0	0	225,000	0
WILLISTON	7,000,000	3,655,517	0	3,344,483	3,655,517
RENWICK DAM	23,320	7,117	7,117	16,203	0
MISSOURI RIVER FLOOD CONTROL	4,000,000	4,000,000	4,000,000	0	0
FLOODWAY PROPERTY ACQUISITIONS					
MINOT	23,879,316	23,879,316	13,678,297	0	10,201,019
WARD COUNTY	6,046,590	6,046,590	31,243	0	6,015,347
VALLEY CITY	4,017,403	4,017,403	142,606	0	3,874,797
BURLEIGH COUNTY	232,649	(114,552)	(114,552)	347,201	0
SAWYER	184,260	184,260	48,416	0	135,844
LISBON	626,250	626,250	22,950	0	603,300
BURLINGTON	43,350	43,350	0	0	43,350
STATE WATER SUPPLY					
REGIONAL & LOCAL WATER SYSTEMS	184,835,694	184,760,694	68,976,013	75,000	115,784,681
FARGO WATER TREATMENT PLANT	22,768,775	22,768,775	22,740,900	0	27,875
SOUTHWEST PIPELINE PROJECT	104,761,201	104,761,200	55,289,306	0	49,471,894
NORTHWEST AREA WATER SUPPLY	15,754,482	15,754,482	2,546,598	0	13,207,884
WESTERN AREA WATER SUPPY AUTHORITY	82,201,384	82,201,384	69,754,982	0	12,446,402
RED RIVER VALLEY WATER SUPPLY	12,521,328	12,521,328	8,032,845	0	4,488,483
CENTRAL NORTH DAKOTA WATER SUPPLY	70,070,800	70,800	69,804	70,000,000	997
UNOBLIGATED STATE WATER SUPPLY	2,081,155			2,081,155	
GENERAL WATER MANAGEMENT					
OBLIGATED	44,770,307	44,770,307	21,702,283	0	23,068,025
UNOBLIGATED GENERAL WATER	28,155,699			28,155,699	
DEVILS LAKE					
OUTLET	870,802	870,802	0	0	870,802
OUTLET OPERATIONS	18,534,211	18,534,210	7,310,904	0	11,223,306
DL EAST END OUTLET	2,774,011	2,774,011	505,355	0	2,268,656
REVOLVING LOAN FUND					
GENERAL WATER PROJECTS	11,000,000	10,574,214	5,649,114	425,786	4,925,100
WATER SUPPLY	25,000,000	14,966,885	12,647,395	10,033,115	2,319,490
TOTALS	1,025,008,125	881,250,642	459,382,408	143,757,484	421,868,234

STATE WATER COMMISSION
PROJECT SUMMARY
2015-2017 Biennium

PROGRAM OBLIGATION

Approvec By	SWC No	Dept	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Feb-17* Balance
				Flood Control:				
SB 2020	1928-01	5000	City of Fargo	Fargo Flood Control Project	6/23/2009	99,506,200	70,585,898	28,920,302
SB 2020	1928-02	5000	City of Fargo	Interior Flood Control Project	12/11/2015	30,000,000	30,000,000	0
SB 2020	1928-03	5000	City of Fargo	Interior Disaster Relief Fund	12/11/2015	30,000,000	30,000,000	0
SB 2020	1928-05	5000	Metro Flood Diversion Authority	Fargo Metro Flood Diversion Authority 2015-2017	7/6/2016	69,000,000	10,625,044	58,374,956
	1771-01	5000	City of Grafton	Grafton Flood Control Project	10/12/2016	32,175,000	0	32,175,000
	1771-02	5000	City of Grafton	Grafton Flood Risk Reduction Project	12/5/2014	1,750,000	1,534,675	215,325
	1974-06	5000	Souris River Joint WRD	Development of 2011 Flood Inundation Maps	12/18/2015	5,600	0	5,600
SB 2371	1974-08	5000	Souris River Joint WRD	Mouse River Reconnaissance Study to Meet Fed Guid	2/15/2013	0	0	0
	1974-09	5000	Souris River Joint WRD	Mouse River Flood Control Design Engineering	8/8/2016	7,317,512	6,633,629	683,883
	1974-11	5000	Souris River Joint WRD	Funding of 214 agreement between SRJB & USACE	12/5/2014	106,500	75,000	31,500
	1974-14	5000	Souris River Joint WRD	StARR Program (Structure Acquisition, Relocation, or I	3/9/2016	7,200,000	410,237	6,789,763
	1974-15	5000	Souris River Joint WRD	Perkett Ditch Improvements	12/2/2016	2,188,592	1,144,558	1,044,034
	1974-16	5000	Souris River Joint WRD	Corps of Engineers Feasibility Study MREFPP	12/9/2016	750,000	276,478	473,522
	1974-18	5000	Souris River Joint WRD	Rural Reaches, Preliminary Engineering	10/12/2016	260,000	4,640	255,360
	1974-19	5000	Souris River Joint WRD	4th Avenue Tieback Levee & Burlington Levee - Desig	10/12/2016	3,900,000	169,230	3,730,770
	1974-20	5000	Souris River Joint WRD	Utility Relocations	10/12/2016	467,057	16,508	450,549
	1974-21	5000	Souris River Joint WRD	Highway 83 Bypass & Bridge Replacement	10/12/2016	1,983,623	0	1,983,623
	1758	5000	Souris River Joint WRD-no agreement	International Joint Commission Study Board	5/29/2014	302,500	0	302,500
	1993-01	5000	City of Minot	Downtown Infrastructure Improvements	9/15/2014	1,256,426	819,743	436,683
SB 2371	1344-01	5000	Valley City	Sheyenne River Valley Flood Control Project	12/5/2015	156,993	156,993	0
	1344-04	5000	Valley City	Sheyenne River Valley Flood Control Project PHII	8/29/2016	1,147,500	289,749	857,751
	1504-01	5000	Valley City	Permanent Flood Protection Project	12/5/2014	9,850,444	8,657,402	1,193,042
	1504-02	5000	Valley City	Permanent Flood Protection Project (LOAN)	12/5/2014	3,000,000	0	3,000,000
	1504-03	5000	Valley City	Permanent Flood Protection PH III	12/9/2016	13,157,600	0	13,157,600
SB 2371	1344-02	5000	City of Lisbon	Sheyenne River Valley Flood Control Project	8/8/2016	2,281,610	280,621	2,000,989
	1991-01	5000	City of Lisbon	Permanent Flood Protection Project	5/29/2014	561,702	414,733	146,969
	1991-03	5000	City of Lisbon	Permanent Flood Protection - Levee C Project	3/11/2015	3,153,440	2,775,641	377,799
	1991-06	5000	City of Lisbon	Permanent Flood Protection - Levee E Project	3/9/2016	2,098,000	1,470,053	627,947
SB 2371	1344-03	5000	Fort Ranson	Sheyenne River Valley Flood Control Project	6/19/2013	0	0	0
	849	5000	Pembina Co. WRD	Renwick Dam Rehabilitation	6/26/2014	7,117	7,117	0
SB 2020	1992-02	5000	Burleigh Co. WRD	Missouri River Correctional Center	9/21/2015	1,200,000	1,200,000	0
SB 2020	1992-03	5000	Burleigh Co. WRD	Fox Island Flood Control Funding Update	9/21/2015	2,800,000	2,800,000	0
	2079	5000	City of Williston	West Williston Flood Control	12/9/2016	3,655,517	0	3,655,517
				Subtotal Flood Control		***331,238,933***	***170,347,949***	***160,890,984***
				Floodway Property Acquisitions:				
	1993-05	5000	City of Minot	Minot Phase 2 - Floodway Acquisitions	2/25/2014	23,879,316	13,678,297	10,201,019
SB 2371	1523-05	5000	Ward County	Ward County Phase 1, 2 & 3 - Floodway Acquisitions	1/27/2012	6,046,590	31,243	6,015,347
SB 2371	1504-05	5000	ValleyCity	Valley City Phase 1 - Floodway Acquisitions	8/29/2016	4,017,403	142,606	3,874,797
SB 2371	1992-05	5000	Burleigh Co. WRD	Burleigh Co. Phase 1 - Floodway Acquisitions	3/7/2012	(114,552)	(114,552)	0
SB 2371	2000-05	5000	City of Sawyer	Sawyer Phase 1 - Floodway Acquisitions	6/13/2012	184,260	48,416	135,844
	1991-05	5000	City of Lisbon	Lisbon - Floodway Acquisition	12/9/2016	626,250	22,950	603,300
	1987-05	5000	City of Burlington	Mouse River Enhanced Flood Plan Property Acquistior	12/29/2015	43,350	0	43,350
				Subtotal Floodway Property Acquisitions		***34,682,617***	***13,808,960***	***20,873,657***
				State Water Supply Grants:				
	2373-35	5000	Grand Forks - Traill RWD	Grand Forks - Traill County WRD	6/13/2012	303,715	303,715	0
	2373-36	5000	Stutsman Rural RWD	Stutsman Rural Water System - Phase IIB, III	2/27/2013	4,739,672	4,443,172	296,500
	2373-38	5000	Stutsman Rural RWD	Kidder Co & Carrington Area Expansion	7/23/2013	991,361	991,361	0
	2373-39	5000	North Central Rural Water Consortium	Carpio Berthold Phase 2	5/29/2014	2,970,141	528,312	2,441,829
	2373-41	5000	North Central Rural Water Consortium	Granville-Deering Area	10/24/2016	5,940,102	3,460,454	2,479,648
	2050-01	5000	Missouri West Water System	South Mandan	3/17/2014	168,606	168,606	0
	2050-02	5000	Grand Forks Traill RWD	Improvements	3/11/2015	4,369,058	3,679,710	689,349
	2050-03	5000	Northeast Regional WD	Langdon RWD - ABM Pipeline Phase 1	10/7/2013	540,437	540,437	0
	2050-04	5000	Northeast Regional WD	Langdon RWD - North Valley Nekoma	3/11/2015	859,341	859,341	0
	2050-05	5000	Northeast Regional WD	North Valley WD - ABM Pipeline Phase 1	3/11/2015	240,672	240,672	0
	2050-06	5000	Northeast Regional WD	North Valley WD - 93 Street	3/11/2015	937,870	937,870	0
	2050-07	5000	Northeast Regional WD	North Valley WD - Rural Expansion	5/29/2014	1,657,591	1,605,795	51,796
	2050-08	5000	Walsh RWD	Ground Storage	10/7/2013	169,977	169,977	(0)
	2050-09	5000	City of Park River	Water Tower	3/11/2015	571,225	571,225	0
	2050-10	5000	City of Surrey	Water Supply Improvements	10/7/2013	1,117,800	1,117,800	0
	2050-11	5000	Cass RWD	Phase 2 Plant Improvements	10/7/2013	3,951,363	3,912,186	39,178
	2050-13	5000	City of Mandan	New Raw Water Intake	10/7/2013	1,567,676	49,788	1,517,888
	2050-14	5000	City of Mandan	Water Treatment Plant Improvements	10/7/2013	226,762	226,762	0
	2050-15	5000	City of Washburn	New Raw Water Intake	10/7/2013	2,334,250	18,776	2,315,474
	2050-16	5000	Tri-County RWD	Improvements	10/7/2013	845,000	845,000	0
	2050-17	5000	Barnes Rural RWD	Improvements	3/11/2015	6,894,412	5,180,498	1,713,914
	2050-18	5000	City of Grafton	Water Treatment Plant Phase 3	10/7/2013	3,381,148	2,320,691	1,060,457
	2050-19	5000	City of Grand Forks	Water Treatment Plant Improvements	10/7/2013	3,849,151	3,849,151	0
	2050-20	5000	City of Dickinson	Capital Infrastructure	10/6/2015	9,875,025	7,510,749	2,364,276
	2050-21	5000	Watford City	Capital Infrastructure	2/27/2014	1,897,040	1,178,862	718,178
	2050-22	5000	City of Williston	Capital Infrastructure	2/27/2014	4,119,610	2,281,794	1,837,816
	2050-23	5000	Greater Ramsey WRD	SW Nelson County Expansion	3/17/2014	4,199,547	3,357,732	841,816
	2050-24	5000	All Seasons Water District	System 1 Well Field Expansion	9/15/2014	292,500	0	292,500
	2050-25	5000	All Seasons Water District	Bottineau County Extension, Phase I	7/29/2015	896,000	562,571	333,429
	2050-26	5000	City of Fargo	Fargo Water System Regionalization Improvements	7/29/2015	6,841,750	2,420,406	4,421,344
	2050-27	5000	City of Tioga	Tioga Water Supply Improvement Project	7/29/2015	2,190,000	1,914,381	275,619
	2050-28	5000	City of Mandan	Water Systems Improvement Project	10/6/2015	2,582,535	111,904	2,470,631
	2050-29	5000	City of Minot	Water Systems Improvement Project	10/6/2015	3,634,000	78,477	3,555,523
	2050-30	5000	Watford City	Water Systems Improvement Project	10/6/2015	5,435,087	52,092	5,382,995
	2050-31	5000	City of West Fargo	Water Systems Improvement Project	10/6/2015	3,426,210	1,824,470	1,601,740
	2050-32	5000	City of Williston	Water Systems Improvement Project	10/6/2015	10,890,472	3,033,462	7,857,010
	2050-33	5000	Stutsman RWD	Phase V Storage & Pipeline Expansion Project	10/6/2015	4,170,100	2,598,922	1,571,178
	2050-34	5000	North Prairie RWD	Storage and Water Main	10/6/2015	3,459,837	1,212,883	2,246,954
	2050-35	5000	Southeast Water Users Dist	System Wide Expansion Feasibility Study	10/6/2015	11,826,000	247,695	11,578,305
	2050-36	5000	City of Dickinson	Water Systems Improvement Project	10/6/2015	1,042,500	0	1,042,500
	2050-37	5000	City of Dickinson	Dickinson State Avenue South Water Main	12/11/2015	965,000	0	965,000
	2050-38	5000	Dakota Rural Water District	Reservoir C Expansion	12/11/2015	901,500	780,468	121,032
	2050-39	5000	Missouri West Water System	Crown Butte Service Area Expansion Phase II	12/11/2015	308,000	145,476	162,524
	2050-41	5000	Northeast Regional WD	City of Devils Lake Water Supply Project	12/11/2015	15,543,750	1,336,248	14,207,502
	2050-42	5000	Walsh RWD	Phase 1 & 2 System Expansion	12/11/2015	2,093,350	172,052	1,921,298
	2050-43	5000	All Seasons Water District	System 4 Connection to System 1	12/11/2015	4,900,000	0	4,900,000
	2050-44	5000	City of Beulah	Water Treatment Plant	3/9/2016	2,640,000	35,176	2,604,824
	2050-45	5000	Garrison Rural Water District	System Expansion Project	3/9/2016	2,003,550	29,236	1,974,314
	2050-49	5000	City of Grand Forks	Grand Forks Water Treatment Plant	10/12/2016	30,000,000	2,069,657	27,930,343
				Subtotal State Water Supply		***184,760,694***	***68,976,013***	***115,784,681***

STATE WATER COMMISSION
PROJECT SUMMARY
2015-2017 Biennium

PROGRAM OBLIGATION

Approved By	SWC No	Dept	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Feb-17 Balance
	1984-02	5000	City of Fargo	Fargo Water Treatment Plant	3/17/2014	22,768,775	22,740,900	27,875
	1736-05	8000	SWPP	Southwest Pipeline Project	7/1/2013	104,761,200	55,289,306	49,471,894
	2374	9000	NAWS	Northwest Area Water Supply	7/1/2013	15,754,482	2,546,598	13,207,884
	1973-02	5000	WAWSA	WAWSA- (GRANT)	10/6/2015	12,061,806	11,368,675	693,131
	1973-05	5000	WAWSA	WAWSA- (GRANT)	10/6/2015	60,000,000	48,246,729	11,753,271
	1973-03	5000	Bank of North Dakota	WAWSA - (LOAN)	10/6/2015	10,139,578	10,139,578	0
	325-102	5000	RRVWSP	Red River Valley Water Supply - Intake Design Study	5/29/2014	162,328	32,845	129,483
SB 2020	325-104	5000	Garrison Diversion	Red River Valley Water Supply Project	7/29/2015	12,359,000	8,000,000	4,359,000
	2051-101	5000	Central ND Water Supply	Black and Veatch investigation	1/27/2015	70,800	69,804	997
				Subtotal State Water Supply		***238,077,969***	***158,434,435***	***79,643,533***
				General Water Management				
				Hydrologic Investigations:		***1,125,267***		
	2041	3000	US Geological Survey	USGS Stream Gage Joint Funding Agreement	3/9/2016	529,075	529,075	0
	2041	3000	US Geological Survey	USGS Stream Gage Joint Funding Agreement	10/12/2016	544,110	136,028	408,083
	1400	3000	Fireside Office Solutions	Document Conversion (Water Permit Scanning)	8/23/2016	50,000	7,200	42,800
				Hydrologic Investigations Obligations Subtotal		***1,123,185***	***672,302***	***450,883***
				Remaining Hydrologic Investigations Authority		***2,082***		
				Hydrologic Investigations Authority Less Payments				
				General Projects Obligated		***27,137,633***	***7,219,385***	***19,918,249***
				General Projects Completed		***16,507,407***	***13,810,596***	***2,696,811***
				Subtotal General Water Management		***44,770,307***	***21,702,283***	***23,068,025***
				Devils Lake Basin Development:				
SWC	416-07	5000	Multiple	Devils Lake Outlet	7/1/2013	870,802	0	870,802
SWC	416-10	4700	Operations	Devils Lake Outlet Operations	3/9/2016	18,534,210	7,310,904	11,223,306
SWC	416-15	5000	Multiple	DL East End Outlet	7/1/2013	2,774,011	505,355	2,268,656
				Devils Lake Subtotal		***22,179,023***	***7,816,259***	***14,362,764***
				Revolving Loan Fund:				
			(General Water)					
	2077-02	1050	City of Lisbon	Permanent Flood Protection - Levee C (LOAN)	3/11/2015	886,500	886,500	0
	2077-03	1050	City of Lisbon	Sheyenne River Flood Protection - Levee E (LOAN)	3/9/2016	527,000	527,000	0
	2077-09	1050	City of Lisbon	Permanent Flood Protection - Levee D & F (LOAN)	7/6/2016	243,200	0	243,200
	2077-08	1050	City of Grafton	Grafton Flood Risk Reduction (LOAN)	10/12/2016	3,375,000	3,375,000	0
	2077-06	1050	City of Valley City	Permanent Flood Protection Project (LOAN)	12/28/2016	860,614	860,614	0
	2077	1050	City of Valley City	Valley City Flood Protection - Phase II Construction (LC	12/9/2016	3,289,400	0	3,289,400
	2077	1050	City of Valley City	Valley City Pre Design & Eng & Phase III Buyouts (LOA	12/9/2016	1,392,500	0	1,392,500
			(Water Supply)					
	2077-01	1050	Bank of North Dakota	WAWSA - (LOAN)	10/6/2015	10,000,000	10,000,000	0
	2077-04	1050	North Prairie Rural Water District	Storage & Water Mains (LOAN)	12/11/2015	239,475	239,475	0
	2077	1050	City of Beulah	Water Treatment Plant (LOAN)	3/9/2016	880,000	0	880,000
	2077-05	1050	Northeast Regional WD	City of Devils Lake Water Supply Project (LOAN)	3/9/2016	1,686,920	1,686,920	0
	2077	1050	Walsh Rural WD	Phase 1, 2, & 3 System Expansion Project (LOAN)	3/9/2016	250,490	0	250,490
	2077	1050	Barnes Rural Water District	Rural Expansion (LOAN)	10/12/2016	835,000	0	835,000
	2077	1050	North Central Rural Water Consortium	Carpio Berhold Phase 2 (LOAN)	10/12/2016	215,000	0	215,000
	2077	1050	North Central Rural Water Consortium	Granville-Surrey-Deering Water Supply Project (LOAN)	10/12/2016	139,000	0	139,000
	2077-07	1050	Stutsman Rural Water District	Phase 3 Expansion (LOAN)	10/12/2016	721,000	721,000	0
				Revolving Loan Fund Subtotal		***25,541,099***	***18,296,509***	***7,244,590***
				TOTAL		***881,250,642***	***459,382,408***	***421,868,234***

STATE WATER COMMISSION
PROJECT SUMMARY
2015-2017 Biennium
Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

Feb-17

Approved By	SWC No	Dept	Approved Biennum	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Balance
SE	274	5000	2015-17	City of Neche	Neche Levee Certification Project	3/21/2016	54,000	0	54,000
SWC	322	5000	2009-11	ND Water Education Foundati	ND Water: A Century of Challenge	2/22/2010	36,800	0	36,800
SWC	346	5000	2015-17	Williams County WRD	Epping Dam Spillway Reconstruction	3/9/2016	719,045	544,657	174,388
SWC	347	5000	2009-11	City of Velva	City of Velva's Flood Control Levee System Certificati	3/28/2011	102,000	69,503	32,497
SE	390	5000	2015-17	Logan County WRD	Beaver Lake Dam Rehabilitation Feasibility Study	6/8/2016	16,076	0	16,076
SE	394	5000	2015-17	Golden Valley Co WRD	Odland Dam Rehabilitiation Feasibility Study	10/13/2016	13,220	0	13,220
SE	399	5000	2013-15	Barnes Co WRD	Kathryn Dam Feasibility Study	9/19/2014	21,250	8,508	12,742
SE	420	5000	2015-17	Hettinger Park Board	Mirror Lake Dam Emergency Action Plan	12/2/2016	24,400	0	24,400
SE	460	5000	2015-17	Griggs Co. WRD	Ueland Dam Rehabilitation Feasibility Study	5/20/2016	17,500	0	17,500
SE	477	5000	2015-17	Valley City	Mill Dam Rehabilitation Feasibilty Study	6/8/2016	15,073	0	15,073
SE	512	5000	2015-17	Emmons County WRD	Nieuwsma Dam Emergency Action Plan	11/28/2016	12,000	0	12,000
SE	531	5000	2015-17	Benson Co WRD	Bouret Dam Rehabilitiation Feasibilitly Study	10/11/2016	12,118	0	12,118
SE	561	5000	2015-17	City of Tioga	Tioga Dam EAP	5/20/2016	40,000	0	40,000
SWC	568	5000	2013-15	Southeast Cass WRD	Sheyenne River Reaches Snagging & Clearing Projec	12/5/2014	94,238	0	94,238
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches I	12/11/2015	99,000	25,098	73,902
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches II	12/11/2015	105,000	77,095	27,905
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches III	12/11/2015	90,000	2,965	87,035
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches I,II,III	12/9/2016	294,000	0	294,000
SE	568	5000	2015-17	Barnes Co WRD	Sheyenne River Snagging & Clearing Reach 1 Proj 2	6/8/2016	49,000	0	49,000
SE	571	5000	2013-15	Oak Creek WRD	Oak Creek Snagging & Clearing Project	3/30/2015	3,672	2,565	1,107
SWC	620	5000	2007-09	Lower Heart WRD	Mandan Flood Control Protective Works (Levee)	9/29/2008	125,396	0	125,396
SE	662	5000	2015-17	Walsh Co. WRD	Park River Snagging & Clearing	1/12/2016	29,264	20,492	8,772
SE	662	5000	2015-17	Walsh Co. WRD	Park River Snagging & Clearing	2/17/2017	55,385	0	55,385
SWC	710	5000	2015-17	Maple River WRD	Upper Swan Creek Channel Improvement Project	10/6/2015	171,763	10,177	161,586
SE	841	5000	2013-15	Maple River WRD	Garsteig Dam Repair Project	1/26/2015	40,163	21,502	18,661
SWC	841	5000	2015-17	Maple River WRD	Swan Buffalo Detention Dam #5(Garsteig Dam)	11/17/2016	156,426	4,574	151,852
SWC	841	5000	2015-17	Maple River WRD	Swan Buffalo Detention Dam #12(Absaraka Dam)	11/15/2016	127,164	5,298	121,866
SE	848	5000	2015-17	Sargent Co WRD	Tewaukon WS-T-1-A (Brummond-Lubke) Dam EAP	12/18/2015	20,000	7,984	12,016
SE	848	5000	2015-17	Sargent Co WRD	Tewaukon WS-T-7 (Nelson) Dam EAP	12/18/2015	20,000	7,820	12,180
SE	849	5000	2015-17	Pembina Co. WRD	Renwick Dam Emergency Action Plan	9/29/2015	63,680	56,784	6,896
SWC	980	5000	2015-17	Cass Co. Joint WRD	Rush River Watershed Detention Study	1/7/2016	154,000	23,269	130,731
SWC	980	5000	2013-15	Cass Co. Joint WRD	Swan Creek Watershed Detention Study PHII	3/11/2015	154,000	28,287	125,713
SWC	980	5000	2015-17	Cass Co. Joint WRD	Upper Maple River Watershed Detention Study	1/11/2016	154,000	20,885	133,115
SWC	1056	5000	2015-17	Bottineau Co. WRD	Tacoma Bitz Legal Drain	7/6/2016	312,105	58,097	254,008
SE	1056	2000	2015-17	Bottineau Co. WRD	Stead Legal Drain	2/16/2017	19,142	0	19,142
SWC	1064	5000	2013-15	Rush River WRD	Cass County Drain No. 2 Channel Improvements Proj	3/11/2015	106,989	65,306	41,683
SWC	1071	5000	2015-17	Maple River WRD	Cass County Drain #15 Channel Improvements	3/9/2016	296,562	0	296,562
SWC	1088	5000	2015-17	Maple River WRD	Cass Drain #37 Channel Improvements	3/9/2016	230,326	0	230,326
SWC	1089	5000	2015-17	Maple River WRD	Cass County Drain #39 Channel Improvements	3/9/2016	221,871	0	221,871
SWC	1101	5000	2011-13	Dickey Co. WRD	Yorktown-Maple Drainage Improvement Dist No. 3	12/11/2015	798,562	0	798,562
SWC	1101	5000	2011-13	Dickey-Sargent Co WRD	Riverdale Township Improvement District #2 - Dickey	9/21/2011	500,000	0	500,000
SE	1140	5000	2015-17	Pembina Co. WRD	Drain 11 Outlet Extension Cost Overrun Project	7/7/2015	5,088	0	5,088
SWC	1174	5000	2015-17	Richland Co. WRD	Legal Drain #31 Improvements Project	3/9/2016	161,852	128,498	33,354
SWC	1176	5000	2015-17	Richland Co. WRD	Legal Drain #2 Reconstruction/Extension Project	3/9/2016	535,500	252,010	283,490
SWC	1179	5000	2015-17	Richalnd Co. WRD	Legal Drain #5 (Lateral 27) Reconstruction	3/9/2016	531,000	330,516	200,484
SWC	1179	5000	2015-17	North Cass Co. WRD	Drain #23 Channel Improvements	3/9/2016	137,181	0	137,181
SWC	1222	5000	2015-17	Sargent Co WRD	Drain No 11 Channel Improvements	10/12/2016	1,417,967	0	1,417,967
SWC	1227	5000	2011-13	Traill Co. WRD	Mergenthal Drain No. 5 Reconstruction	9/15/2014	18,502	6,277	12,225
SWC	1231	5000	2015-17	Traill Co. WRD	Carson Drain No. 10 Channel Improvements	10/12/2016	152,328	0	152,328
SWC	1236	5000	2015-17	Traill Co. WRD	Murray Drain No. 17 Channel Improvements	10/12/2016	138,450	0	138,450
SWC	1242	5000	2013-15	Traill Co. WRD	Rust Drain No. 24 Project	12/13/2013	25,152	3,002	22,150
SE	1264	5000	2013-15	Barnes Co WRD	Little Dam Repurposing Feasibility Study	6/17/2015	16,100	3,715	12,385
SWC	1270	5000	2013-15	Burleigh Co. WRD	Apple Creek Industrial Park Levee Feasibility Study	10/7/2013	65,180	0	65,180
SE	1270	5000	2015-17	City of Wilton	Wilton Pond Dredging Recreation Project	12/29/2015	35,707	0	35,707
SWC	1273	5000	2015-17	City of Oakes	James River Bank Stabilization	12/11/2015	262,500	0	262,500
SE	1287	5000	2013-15	McHenry Co. WRD	Souris River Snagging & Clearing Project	2/3/2015	15,000	4,500	10,500
SWC	1294	5000	2013-15	Nelson Co. Park Board	Stump Lake Park Bank Stabilization Project	3/11/2015	115,436	0	115,436
SE	1296	5000	2013-15	Pembina Co. WRD	Bathgate-Hamilton & Carlisle Watershed Study	10/17/2013	45,226	38,500	6,726
SWC	1301	5000	2015-17	Richland Co. WRD	North Branch Antelope Creek NRCS Small Watershec	3/9/2016	113,400	0	113,400
SE	1303	5000	2013-15	Sargent Co WRD	Gwinner Dam Improvement Feasibility Study Program	4/17/2015	42,844	18,750	24,094
SE	1303	5000	2015-17	Sargent Co WRD	Gwinner Dam Breach Project	2/20/2017	31,125	0	31,125
SWC	1303	5000	2015-17	Sargent Co WRD	Shortfoot Creek Watershed Planning Program	3/9/2016	154,000	44,953	109,047
SWC	1311	5000	2015-17	Traill Co. WRD	Buxton Township Improvement District No. 68	3/9/2016	512,090	384,115	127,975
SE	1328	5000	2015-17	North Cass Co. WRD	Drain No. 23 Channel Improv Preliminary Engineering	9/30/2015	5,775	4,854	921
SWC	1331	5000	2015-17	Richland Co WRD	Drain #14 Reconstruction	12/9/2016	315,000	0	315,000
SWC	1389	5000	2013-15	Bank of ND	BND AgPace Program	12/13/2013	180,316	24,737	155,578
SWC	1401	5000	2015-17	Pembina Co. WRD	International Boundary Roadway Dike Pembina	12/11/2015	786,032	491,504	294,528
SWC	1418	5000	2013-15	City of Bisbee	Big Coulee Dam Feasibility Study	5/29/2014	10,963	0	10,963
SE	1444	5000	2015-17	City of Pembina	Flood Protection System Certification	4/19/2016	75,000	73,343	1,657
SE	1453	5000	2015-17	Hettinger County WRD	Karey Dam Rehabilitation Feasibility Study	5/23/2016	13,550	6,697	6,853
SWC	1486	5000	2015-17	Griggs Co. WRD	Thompson Bridge Outlet No. 4 Project	10/6/2015	621,661	0	621,661
SE	1520	5000	2015-17	Walsh Co. WRD	Walsh Co Drain #30-1	8/29/2016	14,000	10,803	3,197
SWC	1523	5000	2015-17	Ward Co. WRD	Robinwood Bank Stabilization Project	10/6/2015	256,449	38,331	218,118
SE	1625	5000	2015-17	Carlson McCain, Inc.	Ordinary High Water Mark Delineations Left Bank of M	12/2/2016	23,800	0	23,800
SWC	1638	5000	2009-11	Mutiple	Red River Basin Non-NRCS Rural/Farmstead Ring Di	6/23/2009	177,864	0	177,864
SWC	1650	5000	2015-17	Sargent Co WRD	Drain #7 Improvement	7/6/2016	202,663	137,145	65,518
SE	1667	5000	2015-17	Traill Co. WRD	Goose River Snagging & Clearing	9/2/2016	47,500	0	47,500
SWC	1705	5000	2011-13	Red River Joint Water Resour	Red River Joint WRD Watershed Feasibility Study - Pl	9/21/2011	60,000	40,782	19,218
SWC	1705	5000	2011-13	Red River Joint Water Resour	Red River Basin Distributed Plan Study	12/7/2012	560,000	0	560,000
SE	1808	5000	2015-17	Steele Co WRD	Beaver Creek Dam Safety Inspection	5/23/2016	2,625	0	2,625
SE	1842	5000	2013-15	Southeast Cass WRD	Wild Rice River Snagging & Clearing	10/27/2015	57,000	37,334	19,666
SE	1842	5000	2015-17	Southeast Cass WRD	Wild Rice River Snagging & Clearing	12/13/2016	57,000	0	57,000
SWC	1859	5000	2015-17	ND Dept of Health	NPS Pollution Project	7/29/2015	200,000	67,003	132,997

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GENERAL PROJECT OBLIGATIONS

Feb-17

Approved By	SWC No	Dept	Approved Biennum	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Balance
SWC	1891	5000	2015-17	Steele Co WRD	Drain No. 8 Channel Improvement	7/6/2016	411,773	400,268	11,505
SWC	1921	5000	2007-09	Morton Co. WRD	Square Butte Dam No. 6/(Harmon Lake) Recreation F	3/23/2009	231,002	38,651	192,351
SWC	1932	5000	2015-17	Nelson Co. WRD	Michigan Spillway Rural Flood Assessment	3/9/2016	1,214,256	1,188,406	25,850
SE	1934	5000	2015-17	Traill Co. WRD	Elm River Snagging & Clearing	9/2/2016	47,500	0	47,500
SE	1946	5000	2015-17	Walsh Co. WRD	Improvement of Walsh Co Drain #22 Preliminary Engi	4/19/2016	10,500	7,637	2,863
SWC	1951	5000	2015-17	Maple River WRD	Lynchburg Channel Improvements	7/6/2016	1,131,338	0	1,131,338
SWC	1951	5000	2015-17	Maple River WRD	Lynchburg Channel Improvements	7/6/2016	63,788	0	63,788
SWC	1968	5000	2013-15	Garrison Diversion	McClusky Canal Mile Marker 10 & 49 Irrigation Project	3/17/2014	256,321	204,707	51,614
SE	1974	5000	2015-17	USGS	Regulated Streamflow Frequency for the Upper Souris	12/16/2016	37,100	0	37,100
SWC	1975	5000	2015-17	Walsh Co. WRD	Drain 31-1	10/12/2016	111,543	0	111,543
SWC	1977	5000	2011-13	Dickey-Sargent Co WRD	Jackson Township Improvement Dist. #1	5/20/2015	1,601,325	1,153,672	447,653
SE	1978	5000	2015-17	Richland-Sargent Joint WRD	RS Legal Dam #1 - Pre-Construction Engineering	10/24/2016	13,680	0	13,680
SWC	1990	5000	2011-13	Mercer Co. WRD	Lake Shore Estates High Flow Diverstion Project	3/7/2012	43,821	0	43,821
SWC	1991	5000	2013-15	City of Lisbon	Sheyenne Riverbank Stabilization Project	9/15/2014	163,720	115,952	47,768
SWC	2008	5000	2013-15	City of Mapleton	Recertification of Flood Control Levee System Project	3/17/2014	101,100	0	101,100
SWC	2022	5000	2011-13	Pembina Co. WRD	Drain #73 Project	6/19/2013	350,400	80,247	270,153
SWC	2043	5000	2015-17	Pembina Co. WRD	District's Drain 78 Outlet Extension Project	12/9/2016	390,041	278,826	111,215
SWC	2045	5000	2013-15	Mercer Co. WRD	LiDAR Collection Project	5/29/2014	10,425	0	10,425
SE	2050-50	5000	2015-17	Grand Forks Traill RWD	Eastern Expansion & TRWD Interconnect Fesibility & I	11/15/2016	75,000	0	75,000
SE	2055	5000	2015-17	Red River Joint Water Resour	Lower Red Basin Regional Detention Study	7/17/2015	45,500	0	45,500
SE	2058	5000	2015-17	City of Grafton	Grafton Debris Removal Plan	9/17/2015	3,900	0	3,900
SWC	2059	5000	2015-17	Park River Joint WRD	North Branch Park River NRCS Watershed Study	10/6/2015	81,200	0	81,200
SWC	2060	5000	2015-17	Walsch Co. WRD	Forest River Watershed Study	10/6/2015	114,100	0	114,100
SWC	2062	5000	2015-17	Traill Co. WRD	Traill Co. Drain #64	7/6/2016	116,558	7,787	108,771
SWC	2063	5000	2015-17	Maple River WRD	Swan Buffalo Detention Dam #8(Embden Dam)	11/17/2016	123,087	4,526	118,561
SWC	2065	5000	2015-17	Cass Co. Joint WRD	Lake Bertha Flood Control Project No. 75	3/9/2016	201,350	0	201,350
SWC	2066	5000	2015-17	Southeast Cass WRD	Sheyenne-Maple Flood Control Dist #1 Mitigation Impr	3/9/2016	198,023	0	198,023
SWC	2068	5000	2015-17	Traill Co. WRD	Stavanger-Belmont Drain No. 52 Channel Impr	10/12/2016	435,015	0	435,015
SE	2068	5000	2013-15	Traill Co. WRD	Stavanger-Belmont Drain No. 52 Channel - Study	4/20/2016	18,589	0	18,589
SE	2069	5000	2015-17	Center Township	Wild Rice River Bank Stabilization	4/19/2016	43,036	42,082	954
SE	2070	5000	2015-17	Garrision Diversion Conservat	Mile Marker 42 Irrigation Project	5/20/2016	29,741	0	29,741
SE	2071	5000	2015-17	Foster County WRD	Alkali Lake High Water Feasibilitly Study	4/19/2016	5,250	420	4,830
SE	2072	5000	2015-17	Barnes Co WRD	Ten Mile Lake Flood Risk Reduction Project	6/8/2016	37,800	988	36,812
SWC	2073	5000	2015-17	Walsh Co. WRD	Oslo Area Ag Levee Feasibility Study	7/6/2016	187,000	51,146	135,854
SWC	2074	5000	2015-17	City of Wahpeton	Flood Control - Levee Certification	7/6/2016	247,500	0	247,500
SWC	2074	5000	2015-17	City of Wahpeton	Toe Drain & Encroachment Project	7/6/2016	1,125,482	0	1,125,482
SWC	2074	5000	2015-17	City of Wahpeton	Breakout Easements	7/6/2016	265,000	0	265,000
SWC	2075	5000	2015-17	Ward Co. WRD	Second Larson Coulee Detention Pond	7/6/2016	602,307	0	602,307
SE	2076	5000	2015-17	Elm River Joint WRD	Elm River Dam #1 Modification Study	7/6/2016	9,503	0	9,503
SE	2078	5000	2015-17	Southeast Cass WRD	Raymond-Mapleton Township Improv Dist No. 76	11/15/2016	20,281	0	20,281
SE	2079	5000	2015-17	City of Williston	West Williston Flood Control	10/24/2016	39,900	0	39,900
SWC	2080	5000	2015-17	Walsh Co. WRD	Sam Berg Coulee Drain	10/12/2016	401,005	0	401,005
SWC	2081	5000	2015-17	Walsh Co. WRD	Drain #70	10/12/2016	898,866	0	898,866
SWC	2083	5000	2015-17	Pembina Co. WRD	Herzog Dam Gate & Catwalk Retrofit - Construction	10/12/2016	117,000	0	117,000
SE	2085	5000	2015-17	Adams Co WRD	Orange Dam Rehabilitation Feasibility Study	10/13/2016	10,770	0	10,770
SWC	2088	5000	2015-17	Pembina Co. WRD	Drain No. 79	12/9/2016	875,428	0	875,428
SE	2089	5000	2015-17	Maple River WRD	Tower Township Improvement District No. 77 Study	12/19/2016	28,175	0	28,175
SE	2090	5000	2015-17	International Water Institute	River Watch Program	1/12/2017	24,150	0	24,150
SE	2094	5000	2015-17	McLean Co WRD	Lower Buffalo Creek Flood Management Feasibility	2/16/2017	7,539	0	7,539
SE	2093/1427	5000	2015-17	Bottineau Co. WRD	Moen Legal Drain	9/6/2016	63,458	44,916	18,542
SE	1396-01	5000	2013-15	Trout, Raley, Montano, Witwe	Missouri River Recovery Program	11/17/2015	75,000	26,565	48,435
SE	1878-02	5000	2015-17	Maple-Steele Joint WRD	Upper Maple River Dam EAP	5/20/2016	12,800	0	12,800
SWC	849-01	5000	2015-17	Pembina Co. WRD	Tongue River NRCS Watershed Plan	3/9/2016	104,703	0	104,703
SWC	AOC/ASS	5000	2015-17	Assiniboine River Basin	Assiniboine River Basin Initiative Funding	7/29/2015	100,000	75,000	25,000
SWC	AOC/IRA	5000	2015-17	ND Irrigation Association (NDI	ND Irrigation Association	10/6/2015	100,000	75,000	25,000
SWC	AOC/RRBC	5000	2015-17	Red River Basin Commission	Red River Basin Commission Contractor	5/20/2015	200,000	150,000	50,000
SWC	AOC/WEF	5000	2015-17	ND Water Education Foundati	ND Water Magazine	5/20/2015	36,000	27,000	9,000
SE	AOC/WUA	5000	2011-13	ND Water Users Association	Dave Koland Term as WUA President	3/23/2015	9,672	5,772	3,899
SWC	PS/WRD/ELM	5000	2013-15	Elm River Joint WRD	Dam #3 Safety Improvements Project	9/15/2014	7,297	1,625	5,672
SWC	PS/WRD/MRJ	5000	2015-17	Missouri River Joint WRB	Missouri River Joint Water Board, (MRJWB) Start up	5/20/2015	20,000	6,347	13,653
SWC	PS/WRD/MRJ	5000	2015-17	Missouri River Joint WRB	Missouri River Joint Water Board (MRRIC) T. FLECK	5/20/2015	45,000	20,212	24,788
SWC	PS/WRD/UPP	5000	2015-17	Upper Sheyenne River Joint V	Upper Sheyenne River WRB Administration (USRJWI	5/20/2015	12,000	3,398	8,602
					TOTAL		27,137,633	7,219,385	19,918,249

STATE WATER COMMISSION
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COMPLETED GENERAL PROJECTS

Approved By	SWC No	Dept	Approved Biennum	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Feb-17* Balance
SWC	228	5000	2013-15	U.S. Geological Survey	(USGS) Operation & Maint of Gaging Station on the Missouri R	12/8/2014	8,970	8,970	0
SWC	240	5000	2011-13	Eddy County WRD	Warwick Dam Repair Project	12/7/2012	110,150	110,150	0
SE	274	5000	2013-15	City of Neche	FEMA Levee Certification Feasibility Study	10/17/2014	37,500	37,500	0
SWC	281	5000	2009-11	Three Affiliated Tribes	Three Affiliated Tribes/Fort Berthold Irrigation Study	10/26/2010	37,500	0	37,500
SWC	346	5000	2011-13	Williams County WRD	Epping Dam Evaluation Project	2/27/2013	66,200	60,840	5,360
SE	346	5000	2013-15	Williams County WRD	Design Engineering for Epping Dam Safety Repair	7/6/2016	24,658	24,658	0
SE	391	5000	2011-13	Sargent Co WRD	Sargent Co WRD, Silver Lake Dam Emergency Repairs	10/12/2011	2,800	0	2,800
SE	568	5000	2013-15	Barnes Co WRD	Sheyenee River Snagging & Clearing Project	4/17/2015	49,500	49,500	0
SWC	645	5000	2009-11	City of Fargo	Hickson Dam Recreation Retrofit Project	10/26/2010	44,280	44,280	0
SWC	646	5000	2009-11	City of Fargo	Christine Dam Recreation Retrofit Project	10/26/2010	184,950	139,034	45,916
SWC	829	5000	2011-13	Rush River WRD	Rush River WRD Berlin's Township Improvement District No. 7	10/19/2011	101,317	0	101,317
SE	849	5000	2015-17	Pembina Co. WRD	Renwick Dam Gate Repair	9/4/2015	53,700	50,066	3,634
SWC	980	5000	2011-13	Maple River WRD	Maple River Watershed Flood Water Retention Study/ Maple R	2/19/2015	3,687	3,687	0
SE	1069	5000	2015-17	North Cass & Rush River	Drain #13 Channel Improvements Project	9/29/2015	46,150	12,293	33,857
SWC	1082	5000	2013-15	Rush River WRD	Cass Co. Drain No. 30 Channel Improvement Project	3/17/2014	5,976	5,970	6
SWC	1135	5000	2011-13	Pembina Co. WRD	Drain #4 Reconstruction Project	6/19/2013	2,673	0	2,673
SWC	1161	5000	2009-11	Pembina Co. WRD	Drain 55 Improvement Reconstruction	3/28/2011	13,846	0	13,846
SE	1179	5000	2013-15	Richland Co. WRD	Drain #5 (27) Reconstruction Project	3/30/2015	13,543	13,543	0
SWC	1183	5000	2013-15	Richland Co. WRD	Drain No. 15 Reconstruction Project	9/15/2014	60,300	49,055	11,245
SWC	1217	5000	2013-15	Tri-County WRD	Tri-County Drain Reconstruction Project	3/11/2015	911,881	590,679	321,202
SE	1219	5000	2013-15	Sargent Co WRD	Drain No. 8 Channel Improvement Preliminary Engineering Pro	5/7/2015	6,650	6,650	0
SWC	1219	5000	2011-13	Sargent Co WRD	City of Forman Floodwater Outlet	12/13/2016	47,012	47,012	0
SWC	1224	5000	2013-15	Traill Co. WRD	Palace Drain Improvement District No. 80	5/20/2015	149,828	130,947	18,881
SE	1289	5000	2011-13	McKenzie Co. Weed Con	Control of Noxious Weeds on Sovereign Lands	9/30/2015	12,514	12,514	0
SE	1290	5000	2015-17	McLean Co. WRD	Painted Woods Lake Flood Mitigation Study	4/1/2016	53,200	53,200	0
SE	1301	5000	2009-11	City of Lidgerwood	City of Lidgerwood Engineering & Feasibility Study for Flood Cc	2/4/2011	15,850	0	15,850
SE	1301	5000	2011-13	City of Wahpeton	City of Wahpeton Water Reuse Feasibility Study/Richland Co	9/8/2011	2,500	0	2,500
SE	1303	5000	2013-15	Sargent Co WRD	Upper Wild Rice Watershed Study	6/24/2015	73,500	73,485	15
SE	1311	5000	2013-15	Traill Co. WRD	Buxton Township Improvement District No. 68	6/17/2015	15,745	15,745	0
SE	1312	5000	2011-13	Walsh Co. WRD	Skyrud Dam 2011 EAP	12/15/2011	10,000	8,073	1,927
SE	1312	5000	2011-13	Walsh Co. WRD	Union Dam 2011 EAP	12/15/2011	10,000	8,350	1,650
SWC	1314	5000	2013-15	Wells Co. WRD	Oak Creek Drain Lateral E Reconstruction Project	9/15/2014	73,057	73,057	0
SE	1314	5000	2015-17	Wells Co. WRD	Oak Creek Lateral E Reconstruction	12/29/2015	20,173	20,173	0
SE	1314	5000	2013-15	Wells Co. WRD	Hurdsfield Area Drain Preliminary Engineering Project	6/11/2015	35,000	35,000	0
SWC	1396	5000	2011-13	U.S. Geological Survey	(USGS) Missouri River Geomorphic Assessment	3/7/2012	10,000	10,000	0
SE	1403	5000	2015-17	ND Water Resources Re:	(NDWRRI) Student Fellowship Program	12/23/2015	18,850	18,850	0
SE	1403	5000	2015-17	ND Water Resources Re:	(NDWRRI) Student Fellowship Program	1/18/2017	18,850	18,850	0
SWC	1418	5000	2013-15	City of Bisbee	Design & Repair of Big Coulee Dam	8/23/2016	1,015,983	1,015,983	0
SWC	1438	5000	2011-13	Cavalier County WRD	Mulberry Creek Phase IV Reconstruction Project	6/19/2013	102,019	2,250	99,769
SWC	1444	5000	2013-15	City of Pembina	2014 Flood Protection System Modification Project	5/29/2014	61,331	61,331	0
SWC	1523	5000	2015-17	Ward Co	Flood Control County Road 18	5/29/2015	325,208	325,208	0
SWC	1554	5000	2013-15	McLean Co. WRD	City of Underwood Floodwater Outlet Project	12/13/2013	1,483,268	1,483,268	0
SWC	1577	5000	2013-15	City of Killdeer & Dunn Cc	Floodplain Mapping Project	5/29/2014	55,000	55,000	0
SE	1607	5000	2011-13	Ward Co. WRD	Flood Inundation Mapping of Areas Along Souris & Des Lacs R	6/15/2011	13,011	0	13,011
SWC	1613	5000	2013-15	North Cass Co. WRD	Cass County Drain No. 55 Channel Improvements Project	9/15/2014	99,923	48,703	51,220
SWC	1625	5000	2013-15	Houston Engineering	(OHWM) Ordinary High Water Mark Delineations	8/20/2014	4,560	0	4,560
SE	1625	5000	2015-17	Ross Engineering, LLC	Gather infor regarding pipeline waterway crossings	2/9/2016	25,000	8,745	16,255
SE	1625	5000	2015-17	HDR Engineering, Inc	Dakota Access PipeLine Missouri River crossing sour analysis	2/9/2016	25,000	21,315	3,685
SB2020	1625	5000	2015-17	ND Parks & Recreation	Sovereign Lands Recreation Use Grant	1/10/2017	1,000,000	1,000,000	0
SE	1640	5000	2013-15	U.S. Geological Survey	(USGS) Maintenance of gaging station on Missouri River below	9/25/2013	8,710	0	8,710
SE	1650	5000	2015-17	Sargent Co WRD	Drain #7 Channel Improvements Study	1/17/2016	6,214	6,214	0
SE	1667	5000	2015-17	Traill Co. WRD	Goose River Snagging & Clearing	12/18/2015	47,500	47,500	0
SE	1701	5000	2013-15	US Army Corps of Engine	Red River of the North Unsteady Flow Model	11/25/2015	17,825	17,825	0
SWC	1758	5000	2013-15	U.S. Geological Survey	(USGS) Stochastic Model for the Mouse River Basin	12/13/2013	40,000	40,000	0
SWC	1792	5000	2009-11	Southeast Cass WRD	SE Cass Wild Rice River Dam Study Phase II	1/29/2015	32,252	32,252	0
SE	1814	5000	2013-15	Richland Co. WRD	Wild Rice River Snagging & Clearing - Bridge #121-2	5/28/2015	16,000	16,000	0
SE	1815	5000	2013-15	Ransom Co. WRD	Sheyenne River Snagging & Clearing - Fort Ransom Reach	6/11/2015	6,350	6,350	0
SE	1842	5000	2013-15	Southeast Cass WRD	Wild Rice River Snagging & Clearing - Bridge Location Sites	2/3/2015	11,063	0	11,063
SE	1842	5000	2015-17	Southeast Cass WRD	Wild Rice River Snagging & Clearing	7/6/2016	24,948	24,948	0
SE	1891	5000	2015-17	Steele Co WRD	Drain No. 8 Channel Improvement Preliminary Engineering Pro	9/29/2015	17,500	17,500	0
SWC	1960	5000	2009-11	Ward Co. WRD	Puppy Dog Coulee Flood Control Diversion Ditch Construction	8/18/2009	796,976	0	796,976
HB 2305	1963	5000	2009-11	Emmons County WRD	Beaver Bay Embankment Feasibilitly Study	8/10/2009	18,078	0	18,078
SE	1967	5000	2009-11	Grand Forks Co. WRD	Grand Forks County Legal Drain No. 55 2010 Contruction	11/30/2010	9,652	9,652	0
SWC	1970	5000	2009-11	Walsh Co. WRD	Walsh Co. Construction of Legal Assessment Drain # 72	3/28/2011	39,115	39,115	0
SE	1974	5000	2015-17	USGS	USGS Web-Based Mouse River Information Page	1/19/2016	24,700	24,700	0
SWC	1975	5000	2011-13	Walsh Co. WRD	Walsh Co. Drain No. 31 Reconstruction Project	9/21/2011	37,742	37,742	0
SWC	1978	5000	2011-13	Richland & Sargent Joint	Richland & Sargent WRD RS Legal Drain No. 1 Extension & Cl	7/23/2015	245,250	168,791	76,459
SWC	1983	5000	2011-13	City of Harwood	City of Harwood Engineering Feasibility Study	12/9/2011	62,500	0	62,500
SWC	1989	5000	2011-13	Barnes Co WRD	Hobart Lake Outlet Project	3/7/2012	266,100	0	266,100
SE	1991	5000	2011-13	City of Lisbon	Sheyenne River Snagging & Clearing Project	2/12/2013	5,000	5,000	0
SWC	1992	5000	2011-13	Burleigh Co. WRD	Burnt Creek Flood Restoration Project	7/29/2015	179,890	176,524	3,366
SE	1998	5000	2011-13	Grand Forks Co. WRD	Upper Turtle River Dam #1 2012 EAP	6/28/2012	10,000	9,365	635
SE	2002	5000	2011-13	Grand Forks Co. WRD	Trutle River Dam #4 2012 EAP	6/29/2012	10,000	8,656	1,344
SWC	2004	5000	2013-15	Grand Forks Co. WRD	Drain No. 57 Project	10/7/2013	413,576	413,576	0
SE	2005	5000	2011-13	Grand Forks Co. WRD	Turtle River Dam #8 2012 EAP	6/29/2012	10,000	9,069	931
SWC	2007	5000	2011-13	Maple River WRD	Pontiac Township Improvement District No. 73 Project	5/11/2015	747,093	594,183	152,910
SWC	2013	5000	2011-13	Richland-Cass Joint WRI	Wild Rice River Watershed Retention Plan	6/8/2015	45,905	45,905	0
SWC	2019	5000	2011-13	Valley City	Sheyenee River Snagging & Clearing Project	12/7/2012	75,000	0	75,000
SWC	2040	5000	2013-15	Walsh Co. WRD	Drain #74 Project	10/7/2013	211,600	211,600	0
SWC	2042	5000	2013-15	Bottineau Co. WRD	Haas Coulee Drain Project	9/15/2014	500,000	500,000	0
SE	2045	5000	2013-15	Stark County	Stark County LiDAR Collection Project (FEMA)	7/17/2015	33,584	33,584	0
SWC	2045	5000	2013-15	McKenzie Co. Commissic	LiDAR Collection Project	9/15/2014	262,308	262,308	0

STATE WATER COMMISSION
PROJECT SUMMARY
2015-2017 Biennium
Resources Trust Fund

COMPLETED GENERAL PROJECTS

Approved By	SWC No	Dept	Approved Biennum	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Feb-17* Balance
SWC	2046	5000	2013-15	Walsch Co. WRD	North Branch Park River Comprehensive Flood Damage Redu	12/13/2013	134,400	108,772	25,628
SWC	2047	5000	2013-15	LaMoure County	LaMoure Co Memorial Park Streambank Restoration	8/3/2016	91,042	64,240	26,802
SWC	2048	5000	2013-15	City of Marion	Marion Flood Mitigation & Lagoon Drainage Project	5/29/2014	116,659	116,599	60
SWC	1878-02	5000	2011-13	Maple-Steele Joint WRD	Upper Maple River Dam Construction Phase	12/13/2013	4,702,936	4,415,496	287,440
SB2020	1928-04	5000	2015-17	NDSU	Fargo Moorhead Diversion Agricultural Impact (Study)	1/20/2016	80,000	79,716	284
SB2009	1986-03	5000	2015-17	USDA-APHIS,ND Dept A	USDA Wildlife	9/9/2015	250,000	250,000	0
SWC	2003-02	5000	2011-13	Southeast Cass WRD	Re-Certification of the West Fargo Diversion Levee System	7/23/2015	52,564	32,813	19,751
SWC	2009-02	5000	2011-13	Southeast Cass WRD	Recertification of the Horace to West Fargo Diversion Levee S	9/17/2012	25,504	25,504	0
SE	ASNDS	5000	2015-17	NDSU	Oaks Irrigation Research Site - New Linear Irrigation System	11/18/2015	25,636	25,636	0
SE	CON/CAR	5000	2015-17	Garrison Diversion	Will and Carlson Consulting Services	1/12/2016	17,500	10,795	6,705
SWC	CON/WIL/CAF	5000	2013-15	Garrison Diversion Conse	Will and Carlson Consulting Contract	12/13/2013	26,451	1,828	24,623
SE	NDAWN	5000	2015-17	NDSU	NDAWN CENTER	2/11/2016	1,500	1,500	0
SE	NDAWN	5000	2015-17	NDSU	NDAWN CENTER	1/31/2017	1,500	1,500	0
SWC	PS/WRD/DEV	5000	2015-17	Devils Lake Joint WRB	DL Manager	5/20/2015	60,000	60,000	0
SWC	PS/WRD/MRJ	5000	2013-15	Missouri River Joint WRB	Missouri River Coordinator	10/7/2013	37,094	14,327	22,767
SE	PSIRRBUF	5000	2015-17	Buford Trenton Irrigation I	Upgrade to 3-Phase Power	4/19/2016	32,770	32,770	0
SE	PSWRDBUR	5000	2015-17	Burleigh Co. WRD	Pebble Creek Golf Course - Hay Creek Bank Stabilization	10/15/2015	22,782	22,782	0
SE	PSWRDCAS	5000	2015-17	Cass Co. Joint WRD	Red River Watershed Comprehensive Detention Plan Updates	11/19/2015	34,025	34,025	0
					TOTAL		16,507,407	13,810,596	2,696,811

Presentation to the North Dakota State Water Commission
Spiritwood Aquifer AEM Study
March 29, 2017

Governor, members of the commission, my name is Jon Patch, I'm the Director of the Water Appropriations Division.

I'd like to update you on the results of a new technology that we recently employed. It's called AEM. And that stands for Airborne Electro-magnetic. It's a geophysical survey method that helps us characterized the resistivity of earth materials, that in turn is an indicator of the sediment texture – the clays, sands, gravels, shale, etc.

Using resistivity to characterize sediment texture is not new, but the way that it's being done with this new technology is truly amazing. Dave Hisz is going to give you a short presentation in a bit but I wanted to take a moment to make a few comments on AEM.

When people ask me "What is AEM?" I say it's like giving the earth an MRI. You'll see what I mean when Dave gives his presentation.

We became aware of this technology a few years ago when our Canadian neighbors used it on the Spiritwood aquifer just on the other side of the international border.
Recently, when we were working on a potential appropriation from the Spiritwood for the CHS fertilizer facility near Jamestown, we realized the need for a better understanding of the geometry of the aquifer. We have a pretty good idea of the exterior boundaries of the aquifer, it's overall width, and even the flow segments within the aquifer. But, it would really be nice to know where the deep channel is, if it's continuous, it's depth, and so forth. The Canadian work looked very promising in that regard, and even though the CHS project never happened, the demand for water from that area hasn't gone away, so we undertook this AEM study on the Spiritwood in that area.

It was quite a procurement process, but, this is one of those examples where the mandatory hoops we were required to jump through really paid off. We got what we consider to be a real bargain price. In the end we spent less than ½ what we anticipated at the start. Part of the reason for that is the in-house expertise we were able to bring to the table.

Still, there were a lot of nerves, a little anxiety, that we were spending a good sum of the state's money on this new technology with a company with no track record in the state, and very little use of their system in ground water investigations.

So, it was with great anticipation and anxiety that I opened the first graphical file when the preliminary results were in, and I have to admit that I was elated. Needless to say, I was both delighted and relieved.

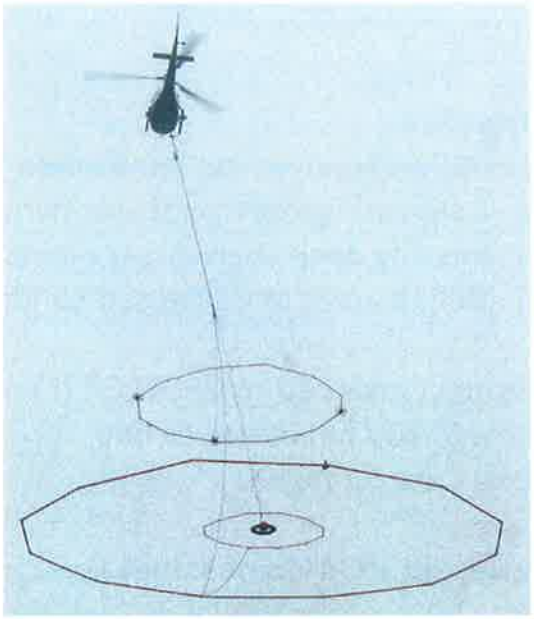
Before Dave gives his presentation, I just want to say that this new methodology has huge potential for us. Not to do away with any of our existing data collection activities, but to help us

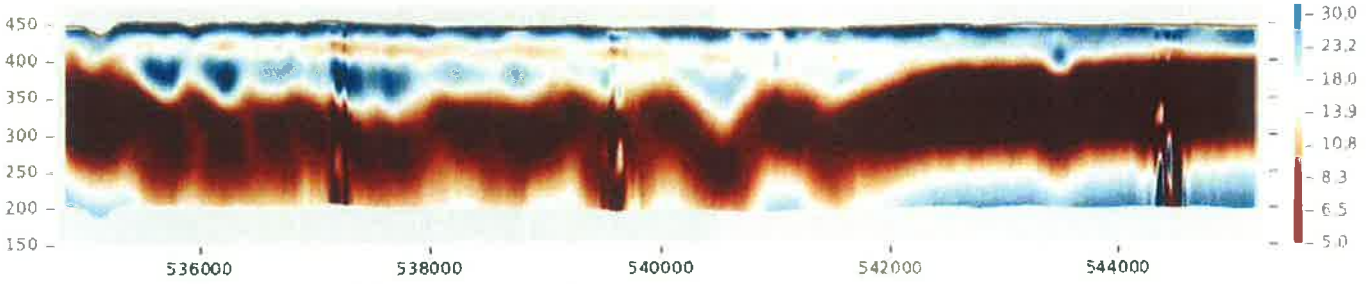
target them and use them more effectively. Dave is going to show you a graph – the first one we got, that shows a relatively narrow 1/4-mile wide blue ribbon running down the axis. That is the deep channel of the Spiritwood aquifer that we were hoping this technology would reveal. Mapping the deep channel at this level of precision could have literally taken years of test drilling. Knowing precisely where the deep channel lies is necessary before one of the next important steps can be taken – that being a pilot study for another newer innovative technology called ASR – that stands for aquifer storage and recovery. This is the concept of recharging and storing excess surface water in an aquifer. It allows our major aquifers to serve as reservoirs and would allow for additional appropriations to be made from them.

But that is another topic for another time.

One last thing I want to say about the AEM study, you are going to be among the first humans to see a new unknown aquifer that we never knew existed, that pre-dates the Spiritwood. This was one of those serendipitous bonuses of the study. Now let's hear more about the AEM study from Dave.

Spiritwood Airborne Electromagnetic Survey 2016





State Water Commission Meeting 29 March 2017

North Dakota State Water Commission
900 EAST BOULEVARD AVENUE
BISMARCK, ND 58505-0850

Survey Area

Objectives:
Use AEM data over the Jamestown Spiritwood
1) Delineate geometry of Spiritwood Aquifer
2) Identify deep channel segments
3) Define areas of decreased conductivity

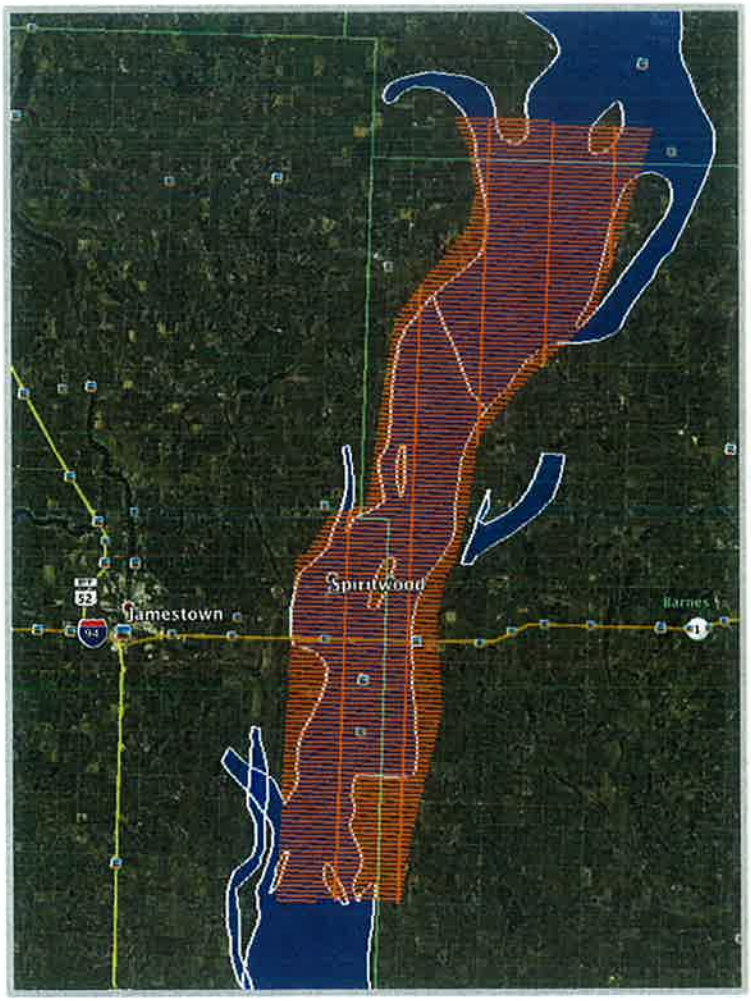
Contract awarded to GEOTECH (Canada)
Price $120 / km of survey line
Total Cost: $234,000

Collected 1950 km of survey lines
from Montpelier to Walum over an 280 mi2 area

East / West lines spaced 500 meters apart
North / South lines spaced 5000 meters

Data Collection occurred October 2016

Final Data delivered in January 2017



North Dakota State Water Commission
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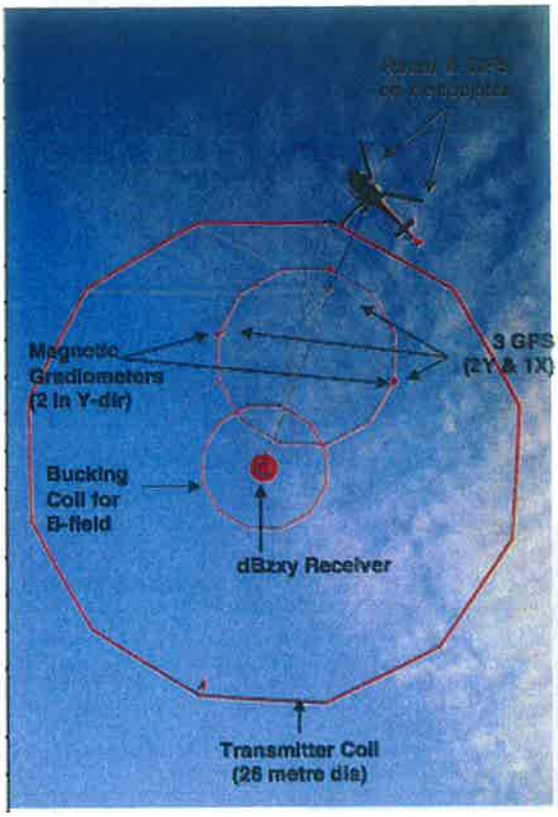
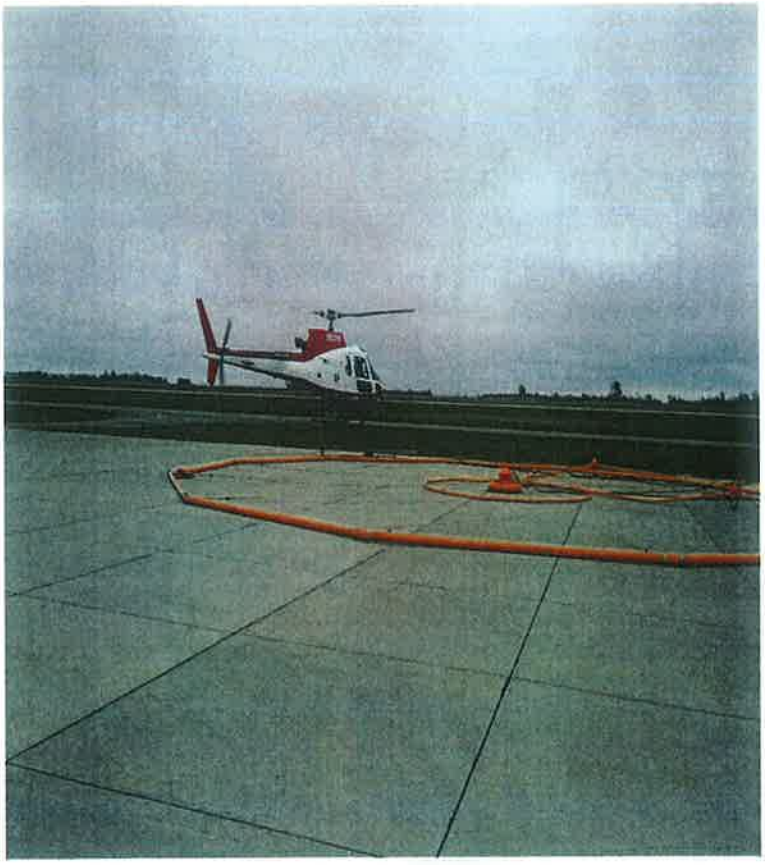
Flying gear





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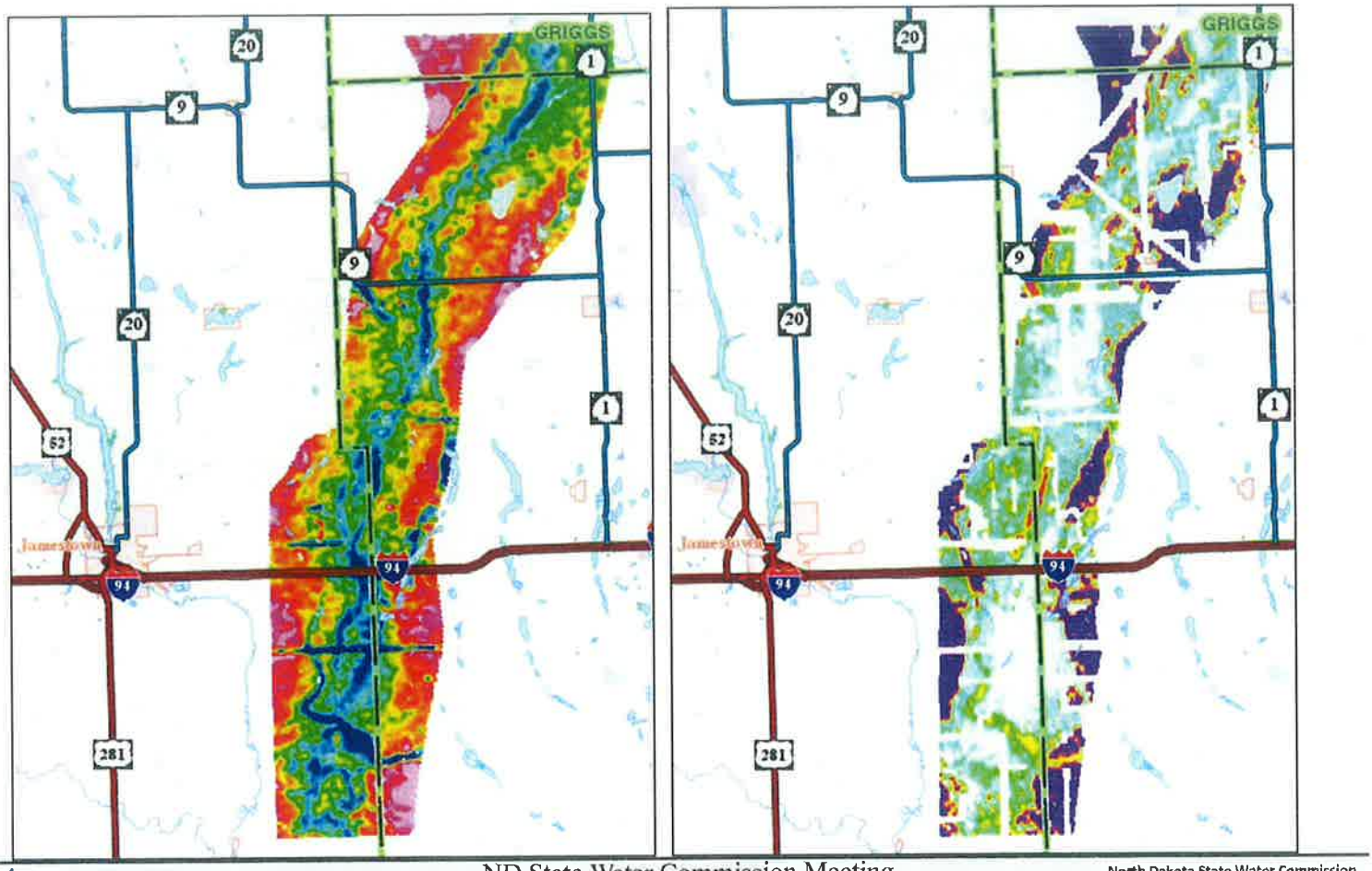
Collected Time Domain Data → Processed Resistivity



North Dakota State Water Commission
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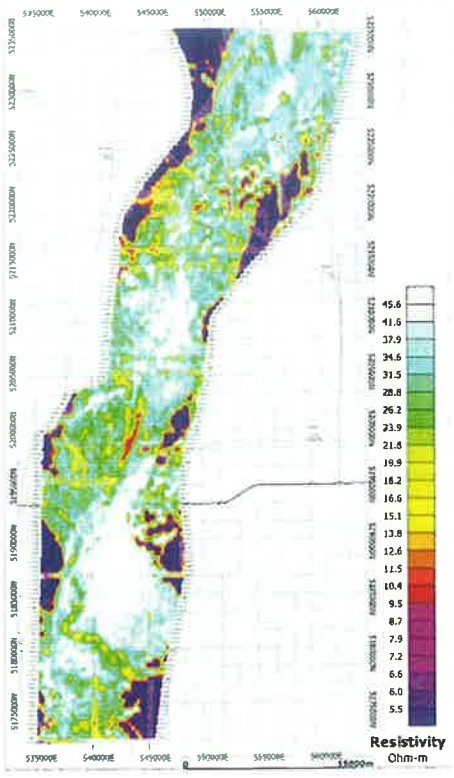
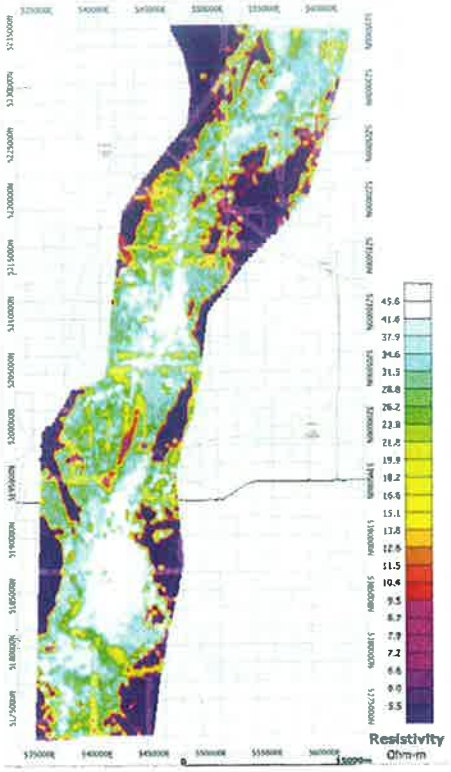
Data Results

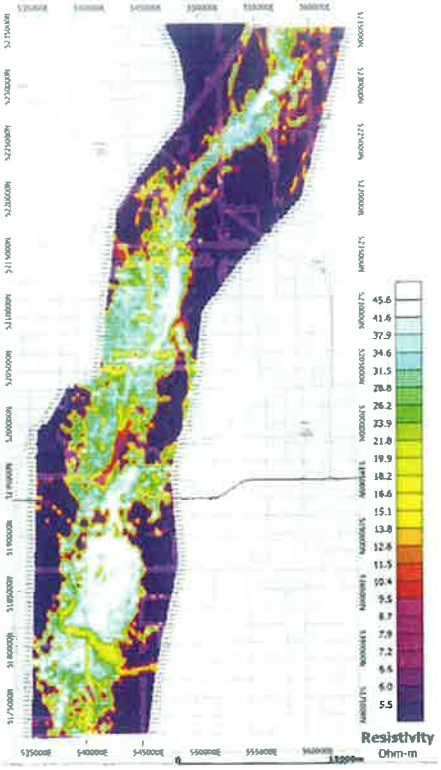
VTEM Inverted Resistivity – 60m



VTEM Inverted Resistivity – 70m

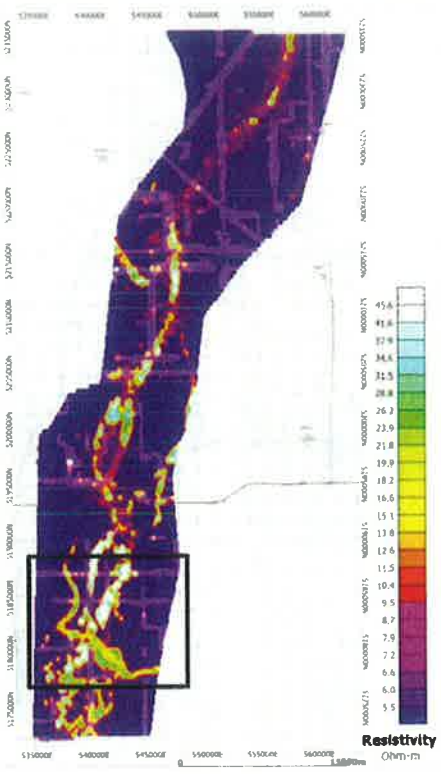


VTEM Inverted Resistivity – 80m

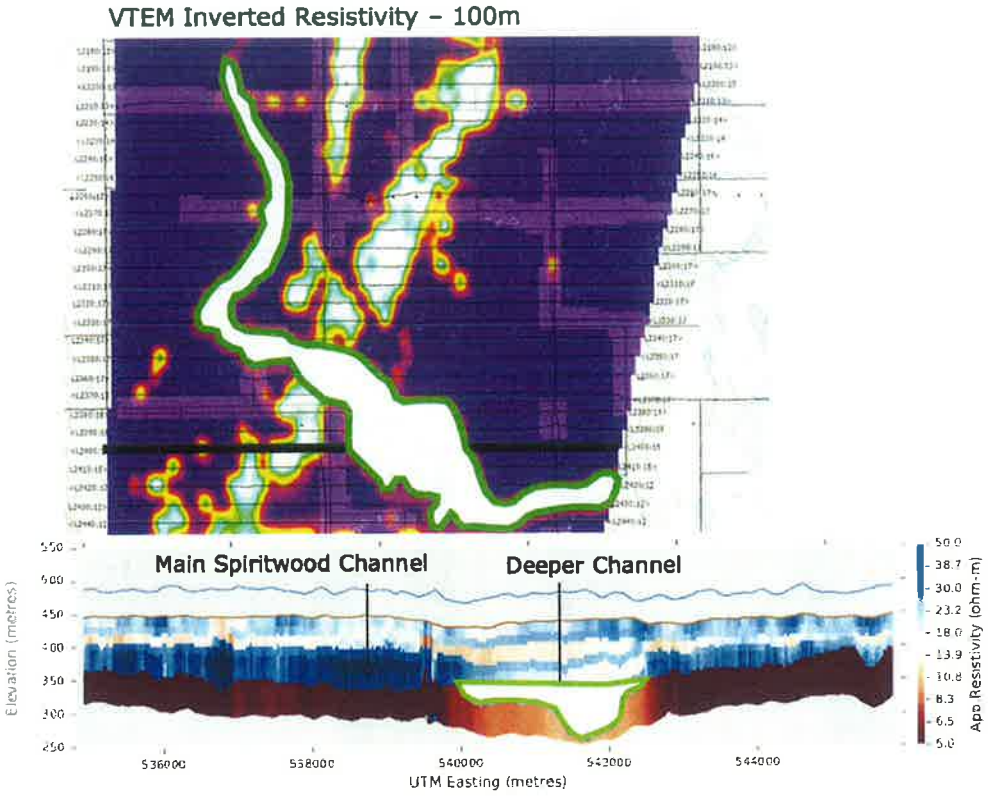


Results – Potential Deep Aquifer

VTEM Inverted Resistivity – 100m



VTEM Inverted Resistivity – 100m



North Dakota State Water Commission
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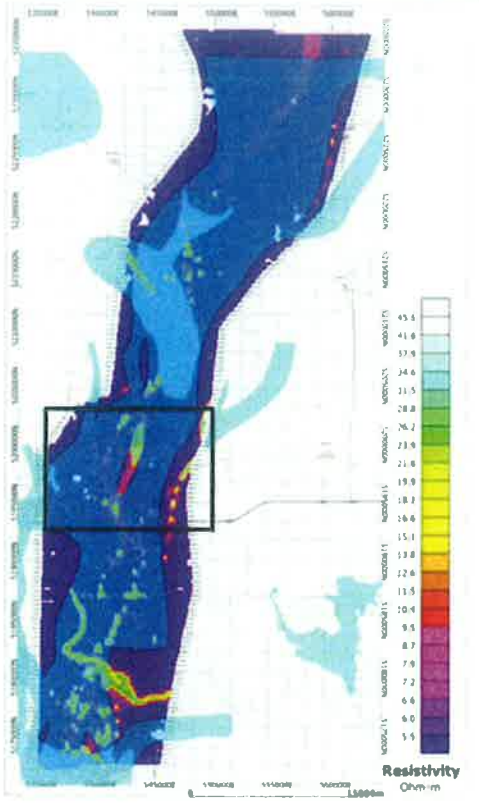
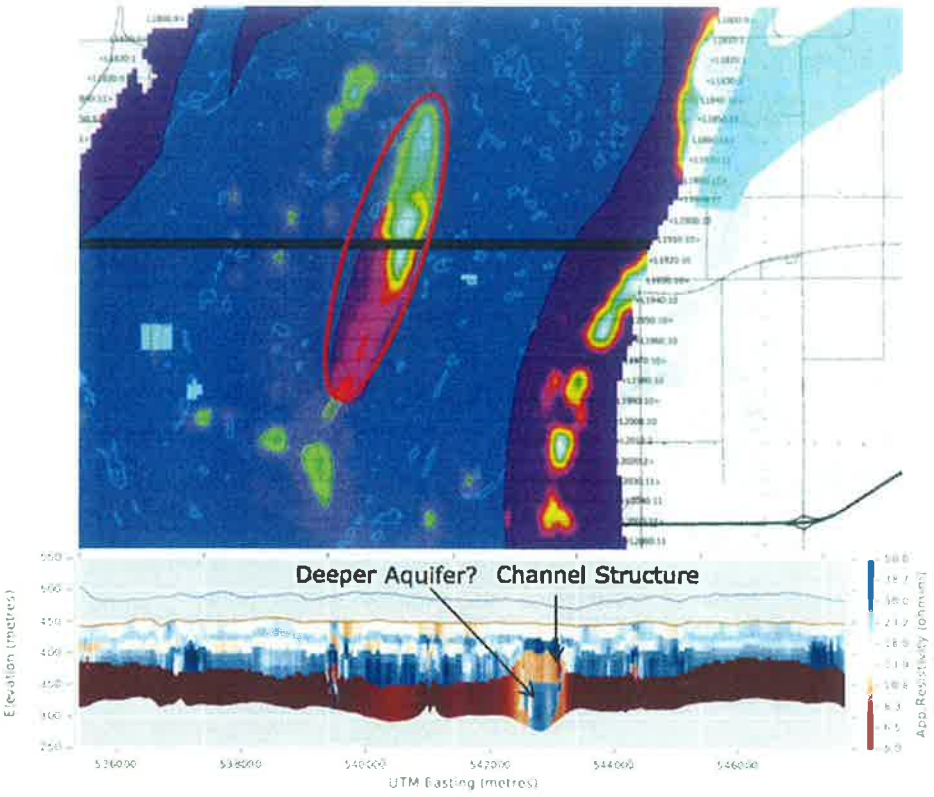
BISMARCK, ND 58505-0850

Confirmation of NDSWC Drilling

VTEM Inverted Resistivity – 110m + Existing Aquifer Layer



VTEM Inverted Resistivity – 110m



North Dakota State Water Commission
900 EAST BOULEVARD AVENUE
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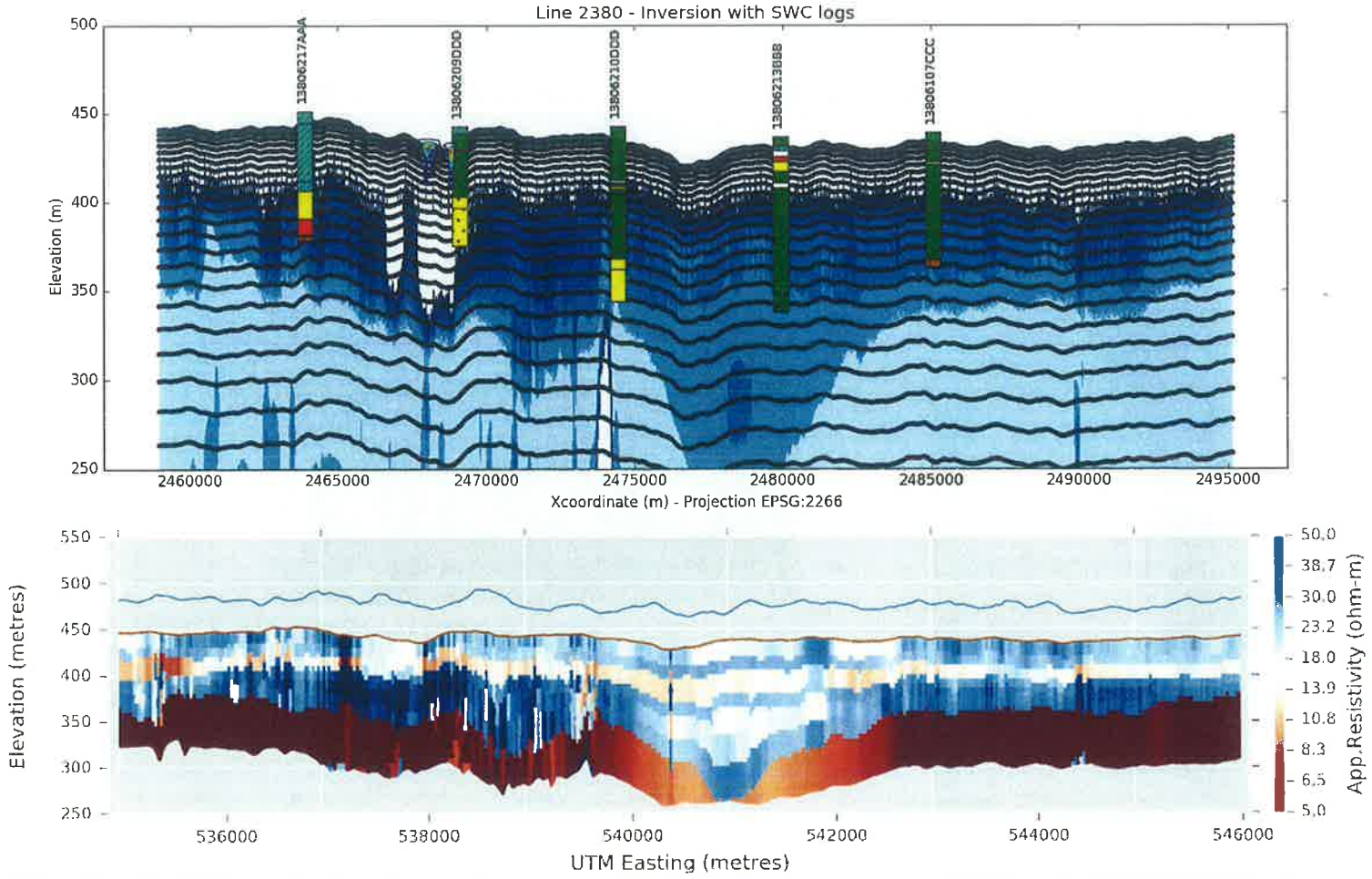
Confirmation of NDSWC Drilling



North Dakota State Water Commission
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Path Forward

Results from survey were successful at delineating the geometry of the Spiritwood Aquifer to depths upwards of 600 feet below land surface.

Potential discovery of 2 deeper channel systems – will confirm during drilling season.

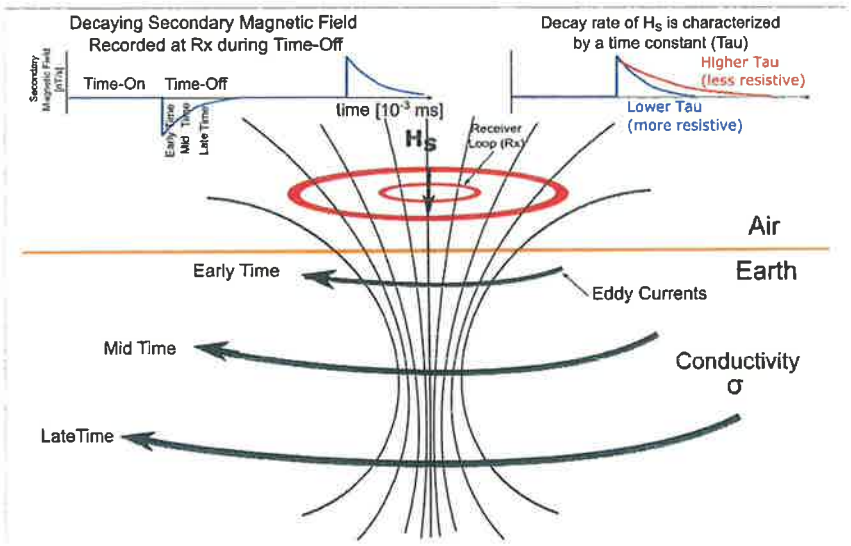
AEM could be used in many buried aquifers throughout the state:

- WEST FARGO
- PAGE
- WAHPETON BURIED CHANNEL
- SPIRITWOOD BURIED CHANNEL
- WHITE SHIELD BURIED CHANNEL
- NEW ROCKFORD BURIED CHANNEL

AEM survey proved cost effective at surveying a large area over a short time period
-week of flying produced decades of drilling data
-allows targeted aquifer characterization with drilling program

Currently this approach is being used in Nebraska, California, Texas and ND

Questions?



North Dakota State Water Commission
900 EAST BOULEVARD AVENUE
BISMARCK, ND 58505-0850

FM AREA DIVERSION PROJECT

March 2017

At a Glance
FM Area Diversion Inlet and Control Structure

ABOUT THE STRUCTURE

The Diversion Inlet and Control Structure is being built by Ames Construction Inc. from Burnsville, MN. The structure includes:

- Three 50-foot wide radial arm floodgates
- A service bridge across the top of the structure
- A mechanical platform and control building

The control structure at the inlet of the Diversion Channel allows:

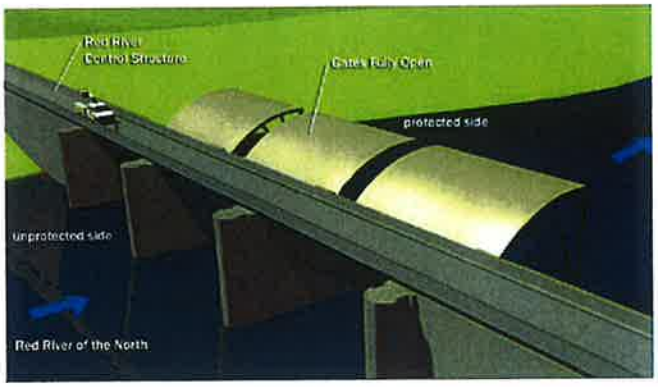
- Water during a 100-year event to flow at 20,000 cubic feet per second into the Diversion Channel
- The structure is necessary to control impacts downstream

Construction of the structure is being administered by the U.S. Army Corps of Engineers.

A rendering of the Diversion Inlet and Control Structure.

CONSTRUCTION FACTS

- The structure is expected to be complete in 2020
- The contract to build the structure is $46 Million
- Each radial arm flood gate weighs 87,000 pounds
- The structure is located just south of Horace near the intersection of County 16 and County 17
- Construction in the spring of 2017 will begin with preloading the site, or piling dirt to stabilize soils



Three radial arm floodgates control the amount of water that enters the Diversion Channel.

Please Join Us

Remembering the Flood of 1997 & Groundbreaking Event

1 p.m. Monday, April 17, 2017

Park and ride will be available

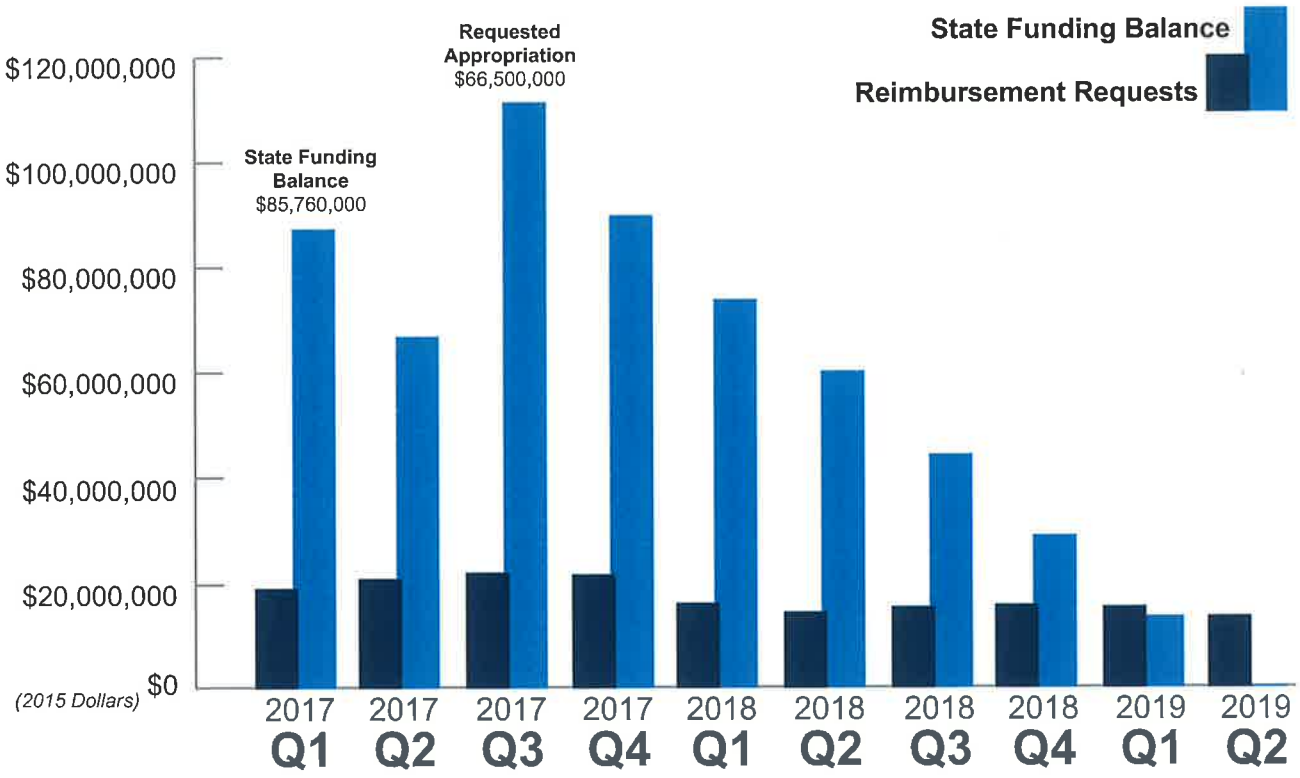
For more information visit www.fmdiversion.com/97floodstories

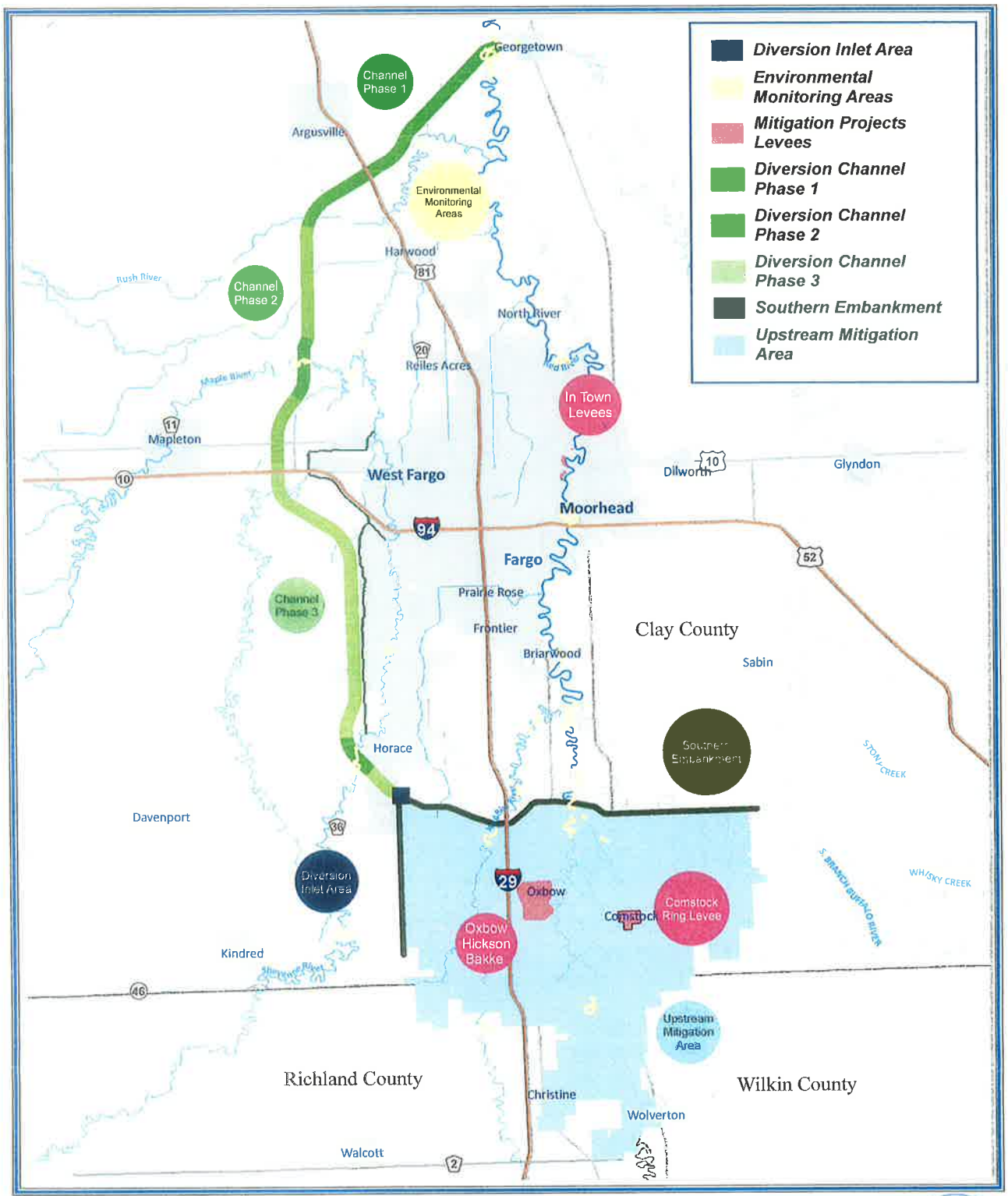
2017-2019 Forecasted State Funding Balance

Federal and Fargo Interior Flood Protection Projects

FM AREA DIVERSION PROJECT

March 2017





Maps are for graphical purposes only. They do not represent a legal survey. While every effort has been made to ensure that these data are accurate and reliable, The Diversion Authority does not guarantee the accuracy of the information, and waives any warranty or guarantee of any kind, express or implied. The data involved in the project is continuously refined and revised; you should not rely on this information for technical purposes or accuracy.

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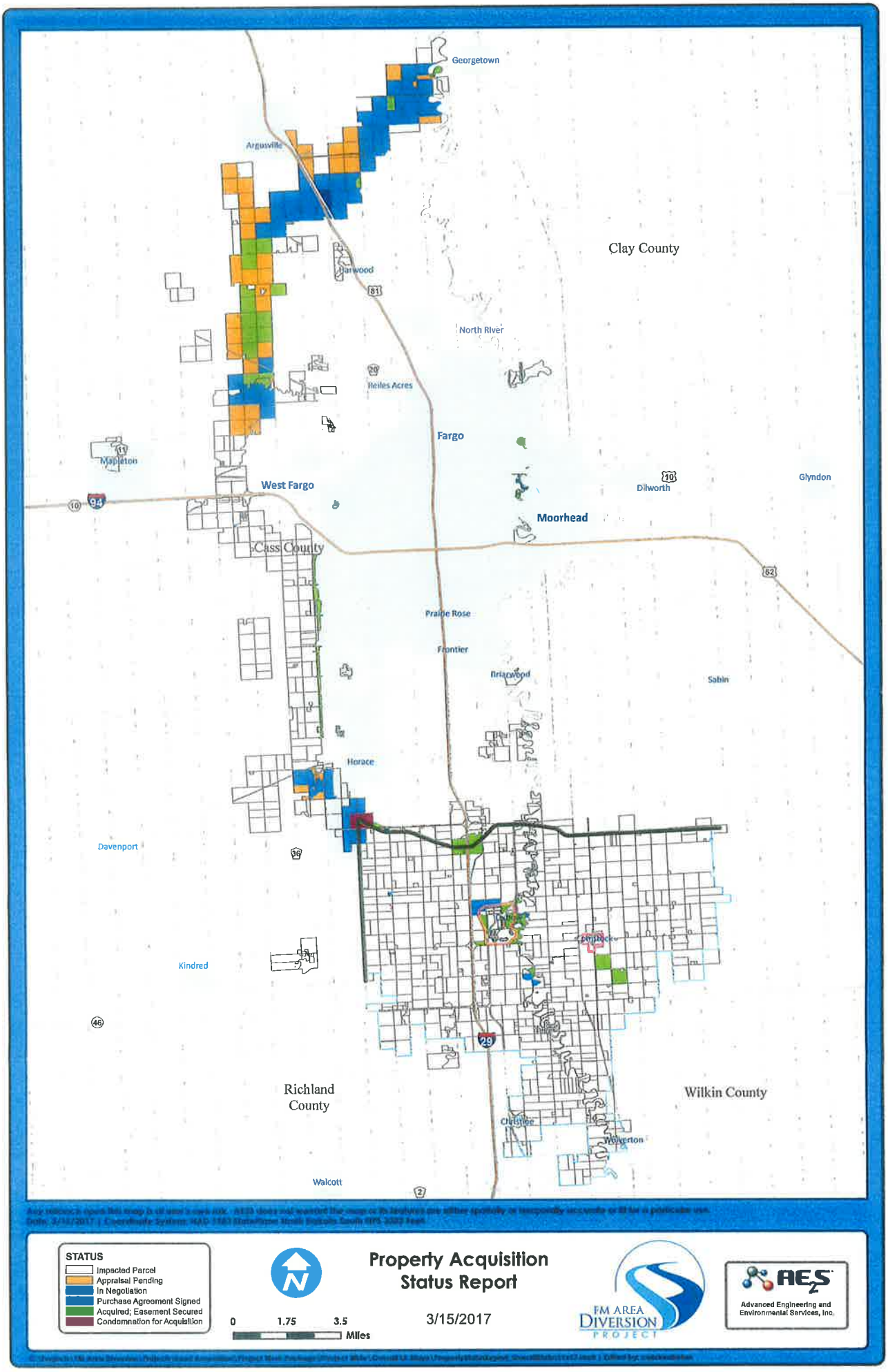
FM Area Diversion
Key Acquisition Areas

3/10/2017

P:\FM Area Diversion\Projects\Land Acquisition\Project Work Package\Project Wide\Overall LA Maps\PropertyAcquisitionSevenPhaseMap8x11.mxd


Georgetown
Argusville
Clay County
Hawood
North River
Reiles Acres
Fargo
Mapleton
West Fargo
Dilworth
Glyndon
Moorhead
Cass County
Prairie Rose
Frontier
Briarwood
Sabin
Horace
Davenport
Kindred
Richland County
Wilkin County
Christine
Hickerton
Walcott
STATUS
Impacted Parcel
Appraisal Pending
In Negotiation
Purchase Agreement Signed
Acquired; Easement Secured
Condemnation for Acquisition
0
1.75
3.5
Miles
Property Acquisition Status Report
3/15/2017
FM AREA DIVERSION PROJECT
AE2S
Advanced Engineering and Environmental Services, Inc.

Informational Sheet

Richland County

Richland County Impacts

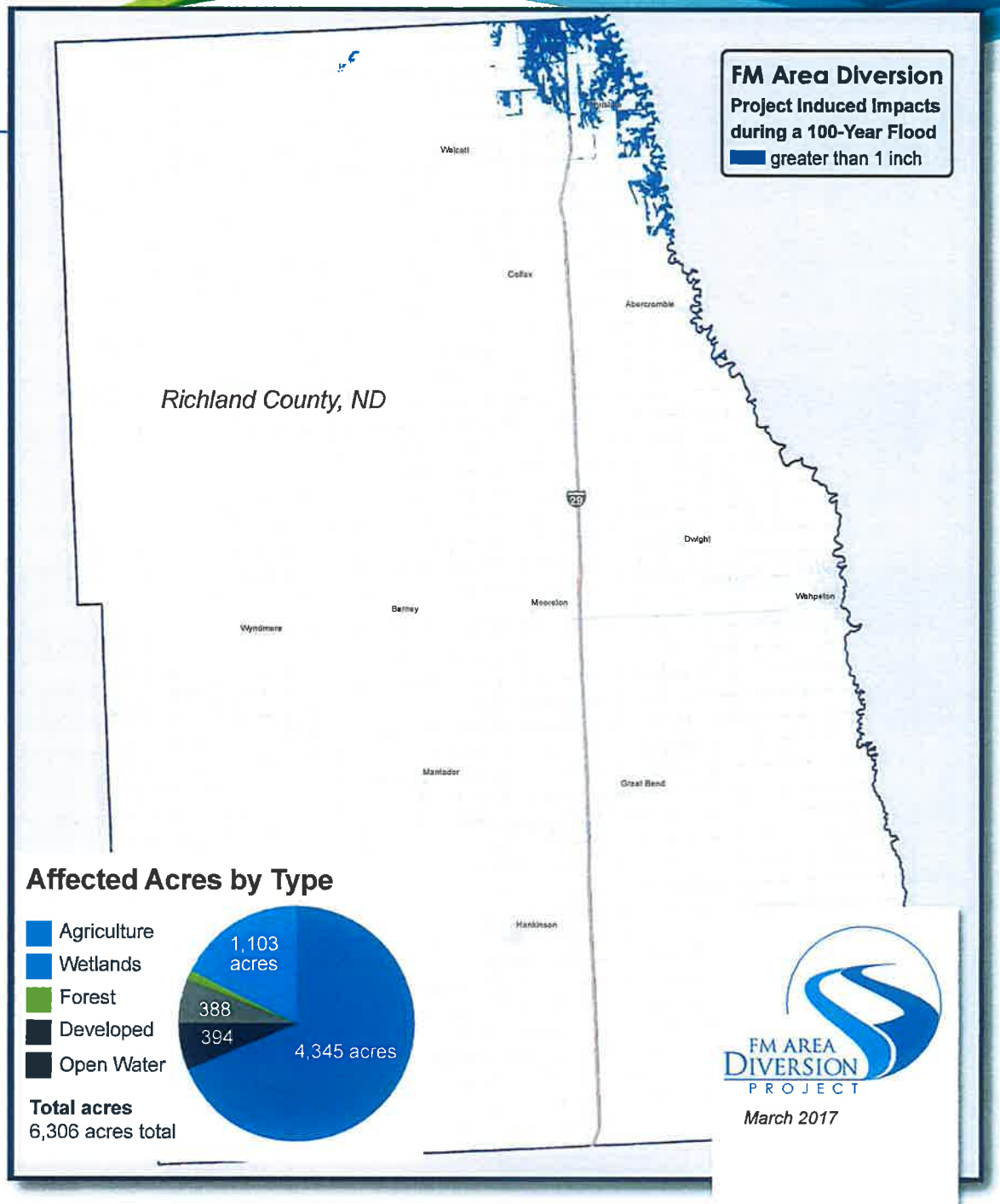
- Due to the dry dam, impacts would only be seen during large flood events when the Diversion Project was operated.
- There would be no impacts until water in the Red River exceeds 35 feet in Fargo. Thirty-feet is considered major flood stage.
- 42% of the acres impacted are already included in the current FEMA 100-year floodplain.
- If the Diversion Project would have been built 100 years ago, it would have operated an estimated 11 times for a total of 69 days.
- During a 100-year flood event, five residential structures would be impacted, two of these structures would be impacted with less than six inches during a 100-year event
- During a 100-year flood, approximately 6,300 acres would have an additional water between one inch to a maximum of three feet.
- The additional duration of flooding is estimated to be two to three days.

Richland County Mitigation

- Flowage Easements will be purchased on impacted land. They will be valued by independent, professional appraisal.
- Development can continue.
- Impacted residences and structures will be acquired in accordance with state and federal law.
- Project impacts will be mitigated consistent with the Mitigation Plan online at www.fmdiversion.com/studies-technical-documents/

Richland County Benefits

- 1,872 Richland County residents, 22% of the county workforce, work in Fargo-Moorhead.
- Flood protection for regional resources including healthcare, entertainment, universities/colleges, transportation and other services.



Informational Sheet

Wilkin County

Wilkin County Impacts

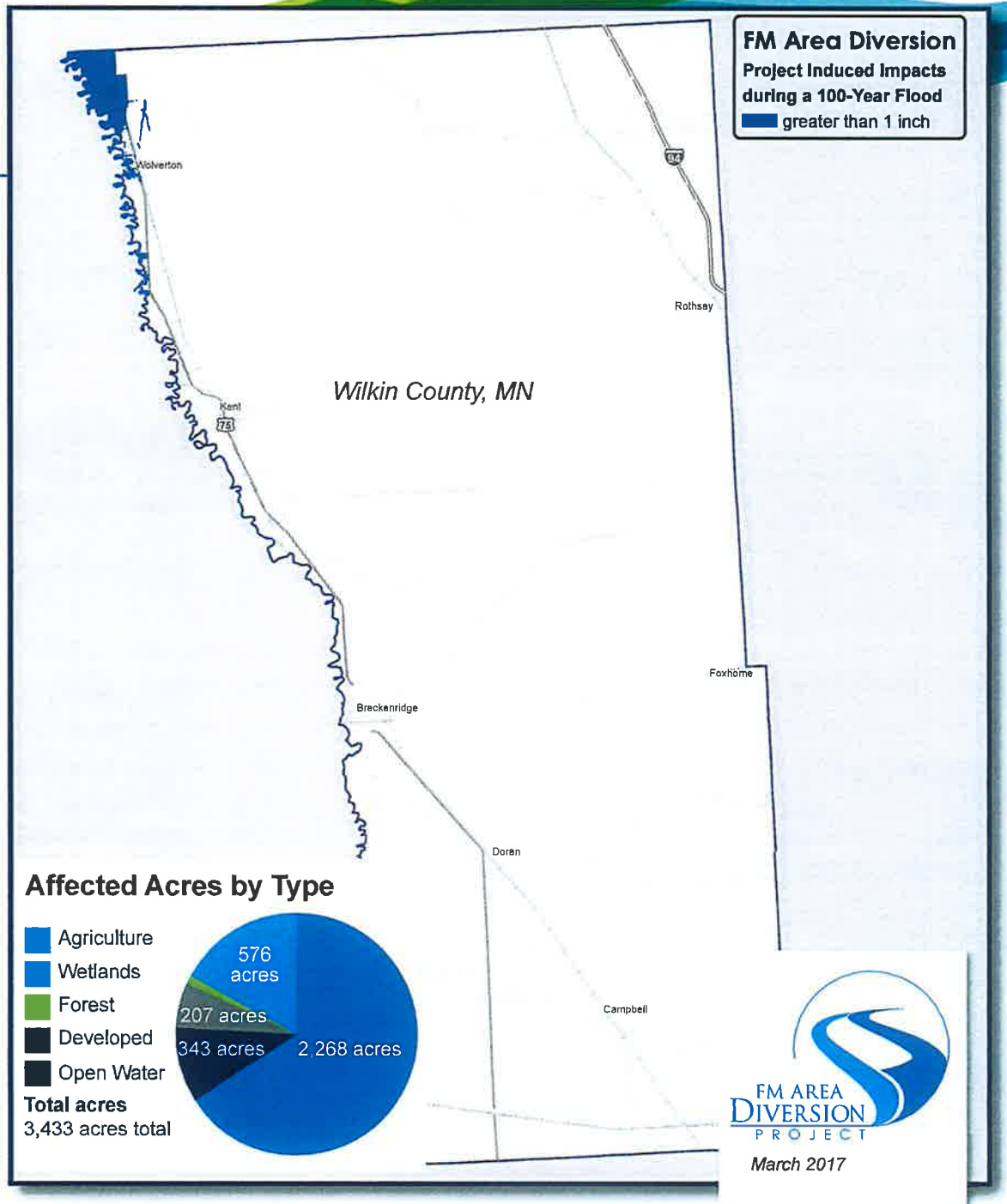
- Due to the dry dam, impacts would only be seen during large flood events when the Diversion Project was operated.
- There would be no impacts until water in the Red River exceeds 35 feet in Fargo. Thirty-feet is considered major flood stage.
- 46% of the acres impacted are already included in the current FEMA 100-year floodplain.
- If the Diversion Project would have been built 100 years ago, it would have operated an estimated 11 times for a total of 69 days.
- During a 100-year flood event, six residential structures would be impacted.
- During a 100-year flood, approximately 3,443 acres would have an additional water between one inch to a maximum of three feet.
- The additional duration of flooding is estimated to be two to three days.

Wilkin County Mitigation

- Flowage Easements will be purchased on impacted land. They will be valued by independent, professional appraisal.
- Development can continue.
- Impacted residences and structures will be acquired in accordance with state and federal law.
- Project impacts will be mitigated consistent with the Mitigation Plan online at www.fmdiversion.com/studies-technical-documents/

Wilkin County Benefits

- 318 Wilkin County residents, 8% of the county workforce, work in Fargo-Moorhead.
- Flood protection for regional resources including healthcare, entertainment, universities/colleges, transportation and other services.



FM AREA DIVERSION PROJECT

March 2017

FM AREA DIVERSION PROJECT

November 2016

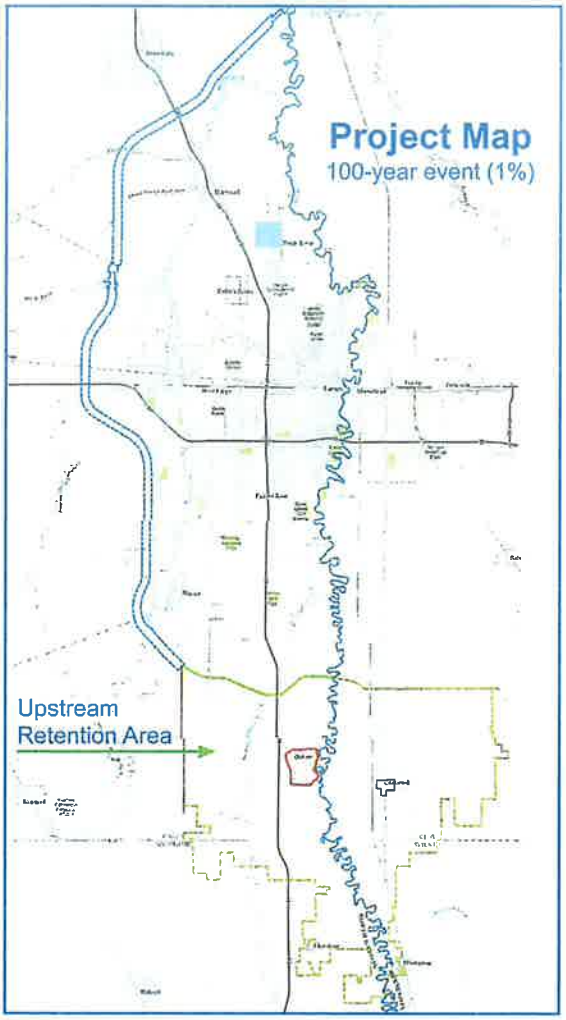
Informational Sheet

Farm Impacts & Mitigation

UPSTREAM RETENTION AREA

The FM Area Diversion Project includes upstream retention of flood waters during times of extreme flooding. This is an essential component to safely control the flood waters upstream and downstream of the metro area and is the most effective and efficient storage. In the past 100 years, the Project would have operated 11 times for a total of 69 days.

During operation of the Project, the upstream retention area will temporarily store various amounts of flood waters, depending on the magnitude of the flood event. The retention area will not be used every year and will not be used until a flood event exceeds 35-feet flood stage through Fargo-Moorhead. An NDSU study concluded there is an 85% chance every year that no water will be stored upstream. Under an extreme flood event, such as the 100-year flood, the upstream retention area will impact about 39,000 acres, and approximately half of those acres would be impacted today under the same flood event without the project.



AGRICULTURAL RISK STUDY OF IMPACTS

NDSU Agribusiness and Applied Economics department studied the risks and impacts of the Project on farm revenue in the upstream retention area. The study identified the following:

- The study indicated that "the key is to determine when producers can begin planting and if planting is delayed due to the diversion what, if any, planting delays cost the producer in lost revenue."
- Accordingly, the NDSU research team studied two particular dates:
  - When flood water leaves the land, and
  - When spring planting begins in the retention area.
- Historical data indicates that spring planting starts most frequently about the same time as the effects of man-made flooding are over.
- Between 10,800 and 18,500 acres (depending on flood event size) will flood due to diversion that would not flood otherwise.
- Cumulative revenue losses across the entire study area ranged from $0 in the best-case (no flood) situations to slightly over $3 million per event over the entire area of 39,000 acres in the worst-case (extreme flood) situations.
- Conclusions from the study indicated that "there is a high-probably of incurring planting delays associated with man-made water storage. But, planting delays created by the proposed FM Diversion, at this time, do not appear to be extensive – at least not several weeks in length. Large delays are possible, but those situations are not as likely as shorter delays."

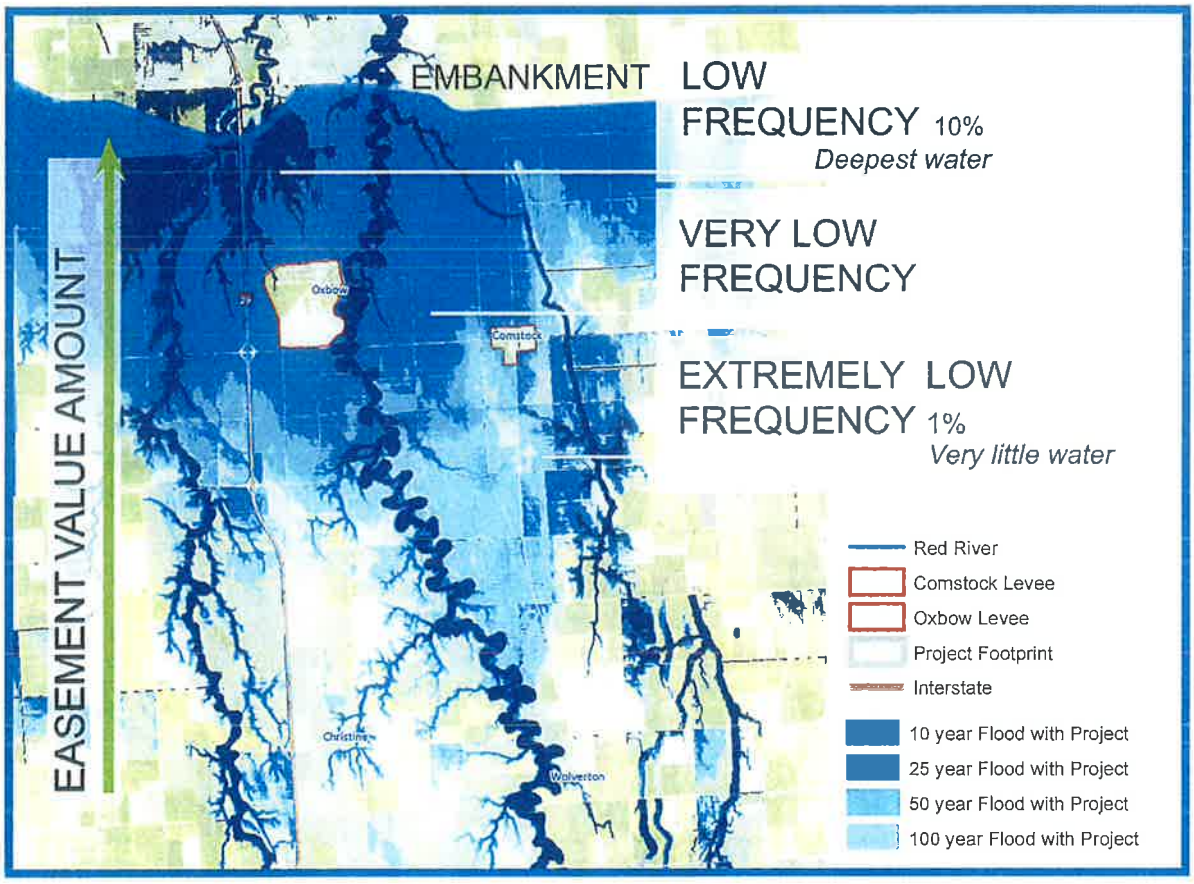
"The study considered numerous factors and concluded that the revenue losses to agricultural producers would not be substantial."

AT A GLANCE

- The retention area will not be used every year. The area will only be used when a flood event exceeds 35-feet.
- There is an 85% chance every year that no water will be stored upstream.
- Smaller storage areas distributed upstream do not provide the level of protection necessary and would have greater impacts.
- Upstream retention in planned location is most effective and efficient because it's close to the area being protected.

MITIGATION: FLOWAGE EASEMENTS

- Upfront payment to property owners impacted by the retention of flood waters.
- Easement provides legal ability to temporarily and occasionally retain flood waters.
- Easement will allow farming to continue, however, development may be regulated depending on extent of impacts.



- Easement value is determined by a market-based appraisal, considering depth, duration, and frequency of flooding, highest and best use of the property, and property impacts.
- Easement values will vary by parcel with the general trend of higher easement values closer to the embankment and lower easement values farther from the embankment.
- Easements are required by Federal law for the Project.
- The purchase of flowage easements is included in the Project cost estimate and financial plan.

MITIGATION: SUMMER FLOOD CROP INSURANCE

- On-going payment to producers for the crop loss caused by summer operation of the Project.
- Summer operation of the Project is extremely unlikely, but summer operation could cause devastating damage to growing crops.
- Diversion Authority has committed to provide greater mitigation than required by Federal or State laws, and greater than what has historically been provided.
- Diversion Authority will purchase an insurance product and provide coverage free of charge to producers.
- Ongoing O&M costs incurred after initial Project construction will be paid by sales taxes or a maintenance assessment to the properties benefited by the Project.

FM Diversion Litigation in brief summary (as of 3/28/17)

Legal Overview

The Richland/Wilkin JPA (RWJPA) initially alleged 10 Counts in its Complaint – five against the Corps and five against the Diversion Authority.

- All five counts against the Corps have been dismissed and three against the Diversion Authority have been dismissed.
- Two procedural claims remain against the Diversion Authority that assert that it violated the Minnesota Environmental Policy Act ("MEPA") and the Minnesota Environmental Rights Act ("MERA").

Recent Updates:

- The RWJPA asked the Court on Jan. 23rd, 2017 to amend its complaint for the fourth time to bring new federal and state allegations against the Corps and the Diversion Authority.
    - The Court refused to allow the RWJPA to reassert the already dismissed federal NEPA claims against the Diversion Authority.
    - The Court reinstated the Corps as an active defendant.
- The RWJPA and the MDNR filed amended complaints on March 24th, 2017. The complaint asserts new federal NEPA claims against the Corps and additional state claims against the Diversion Authority.
- The City of Oxbow requested the Court to remove the injunction against the Oxbow-Hickson-Bakke ring levee.
    - The Court asked the MDNR and RWJPA whether they would agree to lifting that injunction. The MDNR has stated that it will not object to lifting the injunction on OHB ring levee; the lawyer for the RWJPA said he needed to talk to his client.
    - All parties are scheduled to meet with the federal Magistrate judge on April 4th, 2017.

Anticipated Next Steps

The judge stated his desire to move the case along "expeditiously."

The Corps of Engineers has awarded the contract for the gated inlet structure in North Dakota and has given the notice to proceed. All North Dakota permits for this construction have been obtained. The MDNR has previously stated that it does not issue permits for activities in North Dakota.

The MDNR has indicated that it will require the Diversion Authority to obtain a permit for construction of the Red River control structure and associated tiebacks in Minnesota.

- As an accommodation to the MDNR, the Diversion Authority previously submitted a "Preliminary Report" for the control structure, but in October 2016, MDNR denied it.
    - The Diversion Authority challenged the denial by requesting a contested case hearing, which restarts the entire process from scratch and requires an evidentiary hearing and fact finding by an administrative law judge. The MDNR has not yet acted on that request, but is expected to do so soon.

- Since the Corps, and not the Diversion Authority, will be responsible for construction in Minnesota and the Judge previously ruled that the Corps had sovereign immunity from state regulation, it is not apparent that any Minnesota permits are legally needed at this time, if ever.

The RWJPA, and potentially the MDNR, is expected to request a new injunction against either the Corps, the Diversion Authority, or potentially both, to attempt to stop any further construction of the Project unless and until a Minnesota permit is issued. No date has been set for when any hearing on that request might take place, or how quickly the Court might rule.

At a minimum, that process is expected to take several more weeks, and perhaps months.

North Dakota State Water Commission
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MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer-Secretary
SUBJECT: Mouse River Plan Project Status Update
DATE: March 8, 2017

As reported last meeting, Phases 1, 2, and 3 (The 4th Avenue Floodwall, the Napa Valley and Forest Road levees) will require 404 (fill in wet lands) and 408 (modification of existing federal works) permits, which require a final decision on the EIS. The EIS has been completed by Corps of Engineers and was released for public comment on November 4. Public meetings were held beginning in mid-December. The public comment period closed on December 16, however a modification to plans required an addendum to the EIS, which was delivered to affected persons. All comments will be addressed in the final EIS and a signed Record of Decision is expected in July. A favorable decision in this time frame will allow construction to begin in 2017. The first components will be Phase MI-1 (the 4th Ave. flood wall) and MI-2&3 (the Forest Road and Napa Valley levees). Phase MI-2 includes 2 pump stations. Part of this phase, the Peterson Coulee Outlet, can be bid before the EIS process is complete, in the spring of 2017. The remainder is scheduled for summer of 2017. Expected cost of MI-2 and MI-3 is $46.7 Million.

The Perkett Ditch Improvement (Phase MI-2A) is approximately 65 percent complete and should be finished by mid-summer of 2017.

Progress on the feasibility study continues. Current efforts are directed at coordinating continuing progress on the Mouse River Plan with the Corps on a number of issues. These include definition of existing conditions, or "future without project" vs. "future with project". If something which has benefits is built before the "future without" is identified, those benefits can't be counted in the feasibility calculations. If it is built after, its cost may be subtracted from the overall cost, thereby improving the B/C ratio. Also under discussion are matters of hydrology, environmental improvements, bank stabilization and many other details. Fortunately, the discussions are open and cooperative and appear to be making progress. The key milestone for the feasibility decisions is the selection of the "Tentatively Selected Plan". This is expected to occur in August of 2017, followed by actions at the higher levels of the Corps and culminating in the "Chief's Report", expected by April of 2019.

Design on Phase BU-1 (Burlington levee) is approximately 30 percent complete and Phase MI-5 (Northeast Minot Tieback Levee) is about 10 percent complete. They are projected to be complete by the end of 2017 and summer of 2018, respectively. These components are included in the EIS, so they will not be delayed by federal permitting issues. Additional work includes evaluation of potential conveyance improvements in the downstream reaches.

The Souris River Joint Board's StARR acquisition program is currently being implemented. Approximately 165 rural structures have been identified, and about 100 of the owners have indicated an interest in the program. Of these, about 50 have entered agreements with the SRJB to evaluate options. Several closings have recently occurred and this will continue as interest persists and funding allows.

GE:JTF:pdh/1974

Souris River Joint Board
c/o Dwyer Law Office
1605 East Capitol Avenue
Bismarck, ND 58501

info@mouseriverplan.com
www.mouseriverplan.com

February 27, 2017

MEMORANDUM

To: North Dakota State Water Commission
Garland Erbele, PE – State Engineer
Tim Fay, PE – MREFPP Project Manager
Craig Odenbach, PE – Director of Project Development

From: Souris River Joint Water Resource Board
Ryan Ackerman, PE – Administrator

Re: **Mouse River Enhanced Flood Protection Project**
Project Status Update and Cost Share Requests

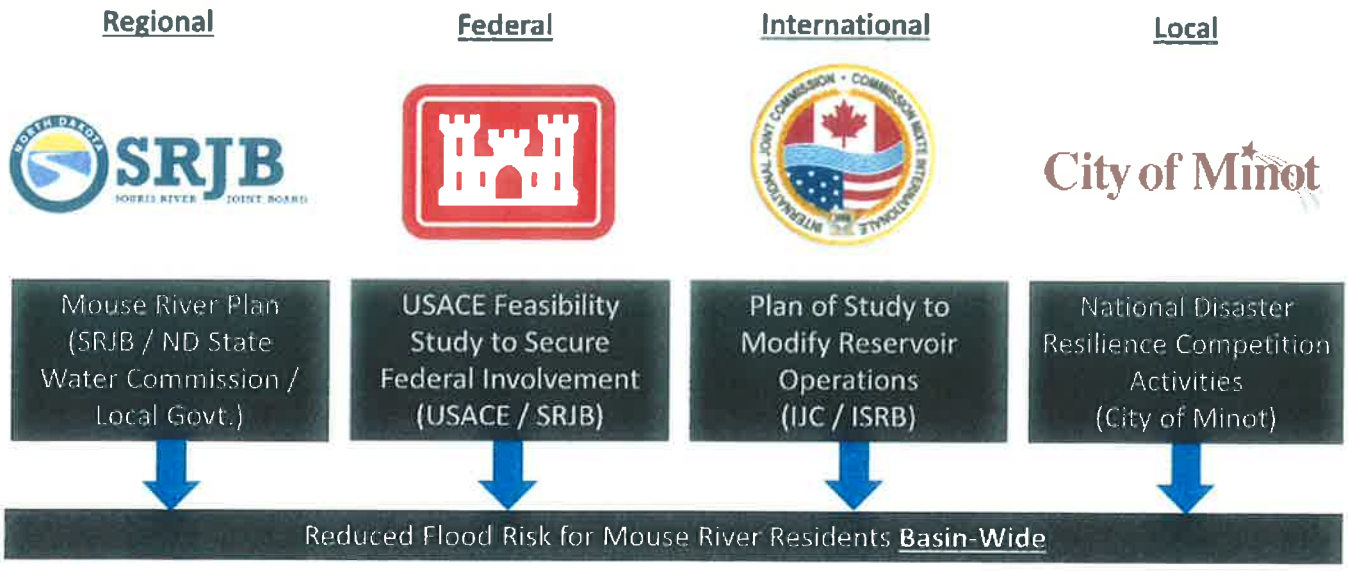
The purpose of this memorandum is to document progress on the Mouse River Enhanced Flood Protection Project and to formally request consideration of several cost share request applications at the State Water Commission's March 29, 2017 meeting.

1. Project Update

The Mouse River Enhanced Flood Protection Project (Mouse River Plan) has seen significant progress since the last State Water Commission meeting held in December 2016. Though the Mouse River Plan is the most visible initiative geared towards reducing flood risk within the Mouse River basin in North Dakota, there are other initiatives proceeding in parallel. Those parallel initiatives include the federal US Army Corps of Engineers (USACE) Feasibility Study, the International Joint Commission (IJC) Plan of Study, and the local National Disaster Resilience Competition (NDRC) initiatives being advanced by the City of Minot.

The intent of this update is to provide a more comprehensive overview of these activities and the coordination occurring to deliver the most cost-effective and resilient solution for the residents of the basin and the State of North Dakota.

A graphical illustration of the various parallel efforts geared to reducing flood risk is shown below:



1.1 Mouse River Enhanced Flood Protection Project (Mouse River Plan)

The Mouse River Plan is a regional initiative being advanced by the Souris River Joint Water Resource Board (SRJB) in conjunction with the State Water Commission and local governments including the City of Minot. The genesis of the Mouse River Plan occurred in the wake of the 2011 Mouse River flood of record, when the North Dakota State Water Commission, under the guidance of Governor Jack Dalrymple, developed Preliminary Engineering Reports (PERs) for a project that would mitigate flood risk along the Mouse River throughout the State of North Dakota.

The resulting project was named the Mouse River Enhanced Flood Protection Project. It has since taken on an abbreviated version of the name – Mouse River Plan. In 2014, following the completion of the PERs, the State Water Commission transferred the direction of the project over to the local sponsor of the project, the Souris River Joint Water Resource Board (SRJB).

The following sub-sections describe several ongoing activities associated with the Mouse River Plan.

1.1.1 Environmental Impact Statement

An Environmental Impact Statement (EIS) has been developed for the portion of the Mouse River Plan that extends from just upstream of Burlington to just downstream of Minot. This section was chosen for a detailed environmental study due to the highly urbanized nature of this section of the basin and the extent of damages that this reach of the river experienced as a result of the 2011 flood.

Analysis of impacts associated with the project have been conducted basin-wide to identify potential upstream and downstream impacts associated with the project in the urbanized areas.

The Draft Environmental Impact Statement (DEIS) was prepared by the Souris River Joint Board on behalf of the USACE and was published for public review in November 2016. The official comment period for the DEIS expired in December 2016.

Concurrently, the City of Minot has moved forward with acquisitions associated with the National Disaster Resilience Competition (NDRC) activities that would have an impact on the alignment of some features identified in the DEIS. As a result, an addendum to the DEIS was issued and delivered to the property owners who would be affected by the alignment changes.

Comments associated with the DEIS and the addendum will be addressed in the Final EIS and delivered to the USACE for review and approval. Based on the most recent schedule provided by the USACE, it is anticipated that the Record of Decision for the Mouse River Plan EIS will be signed in July 2017. W

The issuance of the Record of Decision will represent a significant regulatory milestone for the project and will pave the way for efficient regulatory approvals for future phases of the Mouse River Plan.

1.1.2 Phase MI-1 (4th Avenue Floodwalls) Design

Phase MI-1 (4th Avenue Floodwalls) is currently 100% designed. The design documents for this phase of the project have been submitted to the US Army Corps of Engineers at the 30%, 60%, 90% and 100% design levels for review and comment. Final comments have been addressed and this phase of the project will receive Section 408 permission and a Section 404 permit once the Record of Decision on the Mouse River Plan EIS is signed, anticipated to be in July 2017.

This phase of the project generally consists of approximately 3,000 linear feet of concrete floodwall from US Highway 83 (Broadway) to 3rd Street Northeast in Minot and a large stormwater pump station (178,000 gallons per minute) that will be located on the west side of Broadway.

The estimated cost of this phase of the project is $72.5 million. It is anticipated that this project will be bid in two sub-phases, with the pump station ($23.4 million) being awarded in the spring of 2017 and the floodwalls ($49.1 million) being awarded in the summer of 2017.

1.1.3 Phases MI-2 (Napa Valley Levee) and MI-3 (Forest Road Levee) Design

Phases MI-2 (Napa Valley Levee) and MI-3 (Forest Road Levee) are currently 100% designed. The design documents for these phases of the project have been submitted to the US Army Corps of Engineers at the 30%, 60%, 90% and 100% design levels for review and comment. Final comments have been addressed and these phases of the project will receive Section 408 permission and a Section 404 permit once the Record of Decision on the Mouse River Plan EIS is signed, anticipated to be in July 2017.

This phase of the project generally consists of approximately 9,000 linear feet of earthen levee from the US Highway 83 Bypass to the Canadian Pacific Railroad's crossing of the Mouse River in west Minot, a small stormwater pump station (6,000 gallons per minute), a moderate stormwater pump station (40,000 gallons per minute), and a roadway closure structure located on the north side of the Mouse River at 16th Street Southwest.

The combined estimated cost of these phases of the project is $46.7 million. It is anticipated that Phase MI-2 will be bid in two sub-phases, with the Peterson Coulee Outlet ($2.2 million) being awarded in the spring of 2017 and the Napa Valley levees ($34.6 million) being awarded in the summer of 2017. Phase MI-3 (Forest Road levees) is estimated to cost $9.9 million and is anticipated to be awarded in the summer of 2017.

1.1.4 Phase BU-1 (Burlington Levee) Design

Phase BU-1 (Burlington Levee) is approximately 30% designed. Design is expected to be complete by the end of 2017.

1.1.5 Phase MI-5 (Northeast Minot Tieback Levee) Design

Phase MI-5 (Northeast Minot Tieback Levee) is approximately 10% designed. Design is expected to be complete by summer 2018.

1.1.6 Rural Reaches Design

The evaluation of potential conveyance improvements in the downstream reaches of the basin is currently ongoing. The initial phase of the evaluation is expected to be complete in early April. Depending on the results of the evaluation, the SRJB may move forward with programming a capital project to improve conveyance through McHenry County near the J. Clark Salyer National Wildlife Refuge

1.1.7 Phase MI-2A (Perkett Ditch Improvements) Construction

The construction of Phase MI-2A was awarded to Scherbenske, Inc. in early summer 2016. The improvements associated with this phase include interior drainage modifications and creation of stormwater detention storage that significantly reduces the size of the required Perkett Pump Station, which will be constructed with Phase MI-2.

Construction of this phase of the project is approximately 65% complete and is expected to be fully complete by mid-summer 2017.

1.1.8 Phase MI-2B (Souris Valley Golf Course Improvements) Construction

The construction of Phase MI-2B was awarded to Cordova, Inc. in early summer 2016. The improvements associated with this phase include modifications to the Souris Valley Golf Course to accommodate the construction of Phase MI-2.

Construction of this phase of the project is 95% complete and is expected to be fully complete by mid-summer 2017.

1.1.9 StARR Program Implementation

The SRJB's Rural Structure Acquisition, Relocation or Ring Dike (StARR) Program is currently being implemented. This voluntary program offers assistance to rural structure owners that are not included in the urban portions of the Mouse River Plan.

There are approximately 165 rural structure owners within the Mouse River floodplain. Of the 165 structure owners, approximately 100 have indicated an interest in the program, and approximately 50 have entered into agreements with the SRJB to evaluate options for reducing flood risk at their individual rural sites. Closings have recently occurred for multiple sites and will continue as interest persists and funding allows.

1.2 US Army Corps of Engineers Feasibility Study

The SRJB entered into a Feasibility Cost Share Agreement with the USACE in May 2016. The execution of that agreement started a three-year process intended to identify a component of the project having a federal interest.

Recently, a milestone within the Feasibility Study was reached. In January 2017, the Alternatives Milestone was reached, which identifies the array of alternatives that will be evaluated in further detail based on preliminary assessments of costs and benefits.

Based on best available information and the depth of analysis completed thus far, it appears that there will be a federal interest in portions of the Mouse River Plan. The location of this future federal project is likely within the city limits of Minot on the north side of the river.

At present, the federal Project Delivery Team is working towards the next milestone of identifying the Tentatively Selected Plan. It is anticipated that this will be achieved in August 2017. Future milestones include the Agency Decision, presentation to the Civil Works Review Board in Washington, DC, and the preparation of the Chief's Report, which is expected to be completed by April 2019.

Funding for the project is then dependent upon two congressional actions (Authorization and Appropriation) that are typically taken in the form of federal Water Resources Development Act (WRDA) legislation.

As the non-federal sponsor to the USACE Feasibility Study, the SRJB is working closely with USACE officials to maximize the potential for federal funds to be utilized within the basin for reducing flood risk. A key example of the value of this coordination effort is the definition of the baseline condition by which the USACE is evaluating the future project against, also known as the Future Without Project Condition. Through close consultation with the USACE, the SRJB has worked to establish the baseline such that it includes the construction of Phases MI-1, MI-2 and MI-3 already completed. Without this consideration, it is highly unlikely that a federal funding would be secured for a portion of the project.

1.3 International Joint Commission Plan of Study

The International Joint Commission (IJC) has developed a scope and budget for a Plan of Study to evaluate the operation of reservoirs on the Souris (Mouse) River system in Saskatchewan and North Dakota.

It is anticipated that a Reference to the Plan of Study will be issued by the IJC in the near future. At the International Souris River Board (ISRB) meeting held in Regina, Saskatchewan on February 23, 2017, representatives from the IJC indicated that the issuance of the Reference could occur as early as the end of February 2017.

This Reference would officially authorize the Plan of Study group and would get the study underway. It is anticipated that the study and analysis would take at least three years to complete. At the conclusion of the study, it is anticipated that a modified operations plan of the reservoirs on the system would be recommended to the federal governments to balance the competing interests of water supply and flood risk management.

The SRJB has been actively engaged with the ISRB and has been pursuing a study of the reservoir operations since 2011. The SRJB will continue to inform the study group of the concerns within North Dakota as the study progresses. Likewise, the SRJB is promoting the coordination of activities between the local, regional and federal activities.

1.4 City of Minot National Disaster Resilience Competition Activities

In January 2016, the City of Minot was notified that it was the recipient of $74.3 million from the federal government through the US Department of Housing and Urban Development's (HUD) National Disaster Resilience Competition.

Following the announcement of the grant award, the City of Minot worked with HUD on the terms of the grant agreement that accompanied the $74,340,770 award. This agreement stipulates how the City may utilize the grant award and which projects within the City's application would be eligible for funding through the CDBG-NDR

program. This agreement was signed by HUD on September 21, 2016 and by the City of Minot on September 26, 2016.

Based on the grant agreement, the amount of funding made available to the City of Minot through the CDBG-NDR program for reducing flood risk is $20,975,000. These funds will be used for acquisition of properties, relocation or demolition of structures, restoration of the land, and planning activities associated with reducing flood risk.

The City of Minot has indicated that it intends to utilize this funding to acquire properties that are within the footprint of the project as defined in the November 2016 Draft Programmatic Environmental Impact Statement (DEIS) for the Mouse River Enhanced Flood Protection Project.

Additionally, the City of Minot has indicated that they intend to acquire properties outside of the original footprint, which may eliminate the need for significant lengths of levee or floodwall.

2. Cost Share Requests

The following sections describe various project activities that the SRJB is requesting cost-share approval for.

2.1 Phase MI-1A Construction (Broadway Pump Station)

The Broadway pump station has a design capacity of approximately 178,000 gallons per minute. This phase of the project can be advanced in parallel with the permitting and environmental review of the balance of Phase MI-1 (4th Avenue floodwalls) because this portion of the project lacks a federal nexus. The proposed pump station project will not impact portions of the existing federal flood control project or the existing USACE right of way, meaning that it can proceed without Section 408 permissions being issued by the USACE.

Additionally, the project will not impact the Mouse River, any wetlands or other Waters of the United States, meaning that it can also proceed without a Section 404 permit from the USACE.

The project has undergone significant technical review from the Souris River Joint Board, the City of Minot, the US Army Corps of Engineers and also an independent external peer review by an outside engineering consultant.

The estimated project cost is $23.38 million. ***The SRJB requests 65% of the total cost of the project, or $15,197,000, from the State Water Commission.***

2.2 Phase MI-2C Construction (Peterson Coulee Outlet)

The construction of Phase MI-2 (Napa Valley Levee) and Phase MI-6 (Tierrecita Vallejo Levee) will block interior drainage from reaching the Mouse River. An analysis of interior drainage was completed commensurate with the design of Phase MI-2 of the Mouse River Plan. The interior drainage could be addressed through a number of various alternatives, including: conveying stormwater along its current route and constructing a large pump

station adjacent to the levee; capturing the stormwater in an upper portion of the watershed and conveying it through the levee under pressure to minimize the size of the required pump station; or diverting the stormwater around the levee to minimize the size of the required pump station. The most cost-effective and lowest risk alternative is to divert the stormwater around the levee and to construct a small pump station adjacent to the levee designed to handle local runoff and seepage flows.

Phase MI-2C (Peterson Coulee Outlet) is a separable portion of Phase MI-2 that can proceed independent of other Mouse River Plan activities because the project would provide independent utility once constructed.

The estimated project cost is $2,195,418. ***The SRJB requests 65% of the total cost of the project, or $1,427,022, from the State Water Commission.***

2.3 Phases BU-1 & MI-5 Independent External Peer Review Services

In accordance with USACE guidelines for the review of flood control projects, an independent external peer review and safety assurance review must be completed and submitted to the USACE as part of the permitting process. The State Water Commission previously approved cost share for the design of Phase BU-1 (Burlington Levee) and Phase MI-5 (Northeast Minot Tieback Levee). The cost of providing the Independent External Peer Review services is estimated to be $264,475. ***The SRJB is requesting a 65% cost share from the State Water Commission for these services, or $171,909.***

2.4 City of Minot Acquisitions Authorization

The City of Minot has been acquiring properties within the footprint of the Mouse River Plan using funding provided through previous authorizations from the State Water Commission. In total, the total cost of acquisitions remaining are significantly in excess of the funding that has previously been approved by the State Water Commission.

The City will continue to acquire properties within the footprint of the Mouse River Plan within the city limits of Minot.

The most recent estimate of funding remaining in the 2015-2017 appropriation for Mouse River flood control activities that is currently unobligated is $20,775,587. Assuming that the State Water Commission approves the aforementioned requests of $15,197,000 for Phase MI-1A (Broadway Pump Station), $1,427,022 for Phase MI-2C (Peterson Coulee Outlet), and $171,909 for the Independent External Peer Review services for Phases MI-5 and BU-1, there will be $3,979,656 remaining unobligated.

The SRJB requests that $3,979,656 be approved for acquisitions within the City of Minot as identified in the City of Minot acquisition plan currently on file at the State Water Commission. This amount is the anticipated State share of 75% of the total cost of acquisitions.

2.5 Acquisition Funding Return & Reobligation – Ward County

Ward County was previously approved for cost share to complete acquisitions within the county related to the Mouse River Plan. While additional acquisitions within the county remain, the County's current voluntary acquisition program is drawing to a close. At present, there is $6,015,347 that remains unspent. In discussing with Ward County, they anticipate $700,000 in remaining acquisitions under that program. At a 75% cost share, that equates to $525,000 from the State of North Dakota.

In November 2016, the Ward County Commission authorized the release of $5,490,347 ($6,015,347-$525,000) to the Souris River Joint Board and the City of Minot to be utilized for acquisitions within the City of Minot. Ward County anticipates utilizing the remaining $525,000 for Ward County acquisitions in the near future. While these funds have been previously approved by the State Water Commission for use by Ward County, the fact is that these funds are assets of the State of North Dakota.

Thus, the SRJB is requesting the following concurrent actions from the State Water Commission:

> ***(1) Unobligate $5,490,347 of the $6,015,347 that is currently obligated and unspent for Ward County acquisitions.***
> ***(2) Approve $5,490,347 for acquisitions within the City of Minot that are included within the City of Minot acquisition list, less those additional properties added via the National Disaster Resilience Program.***

Enclosures: Cost Share Request Form – Broadway Pump Station
Supporting Data – Broadway Pump Station
Cost Share Request Form – Peterson Coulee Outlet
Supporting Data – Peterson Coulee Outlet
Cost Share Request Form – Independent External Peer Review Services
Supporting Data – Independent External Peer Review Services
Cost Share Request Form – City of Minot Acquisitions

Copy to: David Ashley, SRJB Chairman
Dan Jonasson, SRJB Member, Minot
Mike Dwyer, SRJB Counsel
Devra Smestad, Ward County Auditor

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MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer - Secretary
SUBJECT: SWPP – Project Update
DATE: March 1, 2017

Oliver, Mercer, North Dunn (OMND) Regional Service Area
Center SA Rural Distribution System 7-9E & 7-9F:
Final change order has been executed by all parties on both Contracts 7-9E and 7-9F. Final administrative items remain before final payments can be made and contracts closed out.

Contract 7-9G Halliday and Dunn Center Service Area:
This contract includes furnishing and installing approximately 330 miles of 6"-1 ½" ASTM D2241 gasketed joint pipe; 395 services; road crossings; connections to existing pipelines and other related appurtenances. The project is located in Mercer and Dunn Counties of North Dakota. The contract has two Bid Schedules. The State Water Commission (SWC) awarded Bid Schedule 1 to Swanberg Construction, Inc., and Bid Schedule 2 to Northern Improvement Company at its March 11, 2015 meeting.

Bid Schedule 1 consists of furnishing and installing approximately 170 miles of 6" – 1 ½" ASTM D2241 PVC gasketed joint pipe and 173 services. This contract had an intermediate completion date of November 1, 2015 for installation of 37 miles of pipeline and 32 users. Because of the 50 additional users added to Contract 7-9E and removal of intermediate completion date, a new milestone completion date was added to this contract. The milestone completion date was August 1, 2016 for 123 users. The contractor requested a 21-day extension on the milestone completion date because of delays caused by easement problems, permit delays and changes made in the field. The 21-day extension was granted to the contractor. The contractor turned over 123 users on August 27, 2016. Twenty-six change orders have been signed by all parties to date, which added 98 additional users and 45 more miles of pipeline to the contract. The Dakota Access Pipeline (DAPL) crossed at five locations in this contract. A change order was issued to bore the crossings with a minimum of 7-foot separation between the proposed DAPL line and the rural water line and to case the water line with fusible PVC. This change order cost was reimbursed by DAPL through an agreement with Southwest Water Authority (SWA). The substantial completion date including modifications through Change Order No. 26 is June 7, 2018. The contract has two additional intermediate dates November 20, 2016 for the original 173 users and September 27, 2017 for 212 users. To date, the contractor has turned over 180 users. The contractor refused to install a few items added by field orders to the contract. Those items were included in a Change Order to Contract 7-9G Bid Schedule 2. The Bid Schedule 2 contractor agreed to complete those items with their unit price cost and remobilization charges for each location.

Bid Schedule 2 consists of furnishing and installing approximately 164 miles of 6" – 1 ½" ASTM D2241 PVC gasketed joint pipe and 218 services. The area is west of Halliday.

Twenty-two change orders have been signed by all parties to date which added 104 additional users and 38 more miles to the contract. The substantial completion date including modifications through Change Order No. 22 is September 18, 2017. The contractor has turned over 315 users.

Contract 5-17 Dunn Center Elevated Reservoir:
This contract includes furnishing and installing a 1,000,000-gallon elevated composite reservoir. The substantial completion date on this contract was August 15, 2014. The tank was turned over for service on August 13, 2015. $260,250 is currently being withheld in liquidated damages for 347 days' delay. We granted a 16-day extension through a change order. The contractor's attorney sent a letter to Bartlett & West indicating that the contractor is willing to pay the actual damages incurred by the Owner. The damage caused by the delay in completion of this tank is the delay in serving the City of Killdeer. We estimated the actual damages to be $212,058.32. This information has been relayed to the contractor's attorney by our legal counsel.

Other Contracts
Contract 8-1A New Hradec Reservoir:
This contract involves furnishing and installing a 296,000-gallon fusion powder coated bolted steel reservoir. Olander Contracting Company is the contractor. The contract documents were executed on May 16, 2013, and the Notice to Proceed was issued on June 3, 2013. The substantial completion date on this contract was September 15, 2013. The tank was put into service on February 20, 2014. The contractor disputes the liquidated damages withheld. The contractor has not provided any justification for the delays. The contractor has filed a lawsuit against us and their tank sub-contractor. Our legal counsel has filed an answer to their lawsuit.

Contract 1-2A Supplemental Raw Water Intake:
The first section of the intake pipe was lowered on July 15, 2015. Through October 31, 2015 tunneling had proceeded to approximately 1786 feet.

In the early morning of November 1, 2015, the contractor's employees heard a loud pop and noticed uncontrolled flow of sand and water entering the pipe approximately 40-50 feet from the caisson end of the pipe. The water and sand flowed out from the pipe and into the caisson shaft, and the employees quickly evacuated the caisson shaft as the water and sand level began to rise.

To remedy the problem, the contractor stabilized the existing pipe to stop the inflow of sand and water with jet grouting. Jet grouting was also completed at the microtunnelling launch zone. Jet grouting is a construction process using high pressure to loosen up the ground and mix it with thin slurry and forming soilcrete columns. The contractor's plan includes a new secondary floor and installing a new intake pipe at a higher elevation. The new intake pipe is proposed to be 12 feet above the center line of the existing installed intake pipe. The new alignment will be rotated 7 degrees to the east from the installed intake alignment. This would result in the intake screen center line to be at 1785 feet compared to 1782 feet originally specified in the Bid Documents. For comparison, the permanent pool elevation for Lake Sakakawea is 1776.3 feet.
The contractor is currently cleaning out the shaft bottom. A plug has been welded on to the installed intake pipe. Few shipments of the new pipeline and few parts of the new microtunneling

boring machine have been delivered to site. The new secondary floor is expected to be poured in the next few weeks.

An application for a new easement and temporary construction license from US Army Corps of Engineers has been submitted by the Bureau of Reclamation on behalf of the project.

The contractor has been working with the project's builder's risk insurance policy for reimbursements for the failed project and for rebuilding the intake pipe. The insurance policy has reimbursed the contractor $7,002,500.64 to date. The SWC submitted a claim of $835,000 for the additional engineering expense to the Contract's Builder's Risk Policy. The insurance company responded that the Contract's builder's risk policy has a sublimit of $100,000 for "Architects and Engineers Fee", and that has been already paid to the contractor. The builder's risk insurance company ACE American Insurance Company has filed a lawsuit against the contractor, James W. Fowler Company and the SWC regarding the insurance payouts.

The pipe submittal and the microtunnelling alignment submittal have been reviewed by BW/AECOM and have been incorporated into a proposed change order which is under review by the contractor. A new schedule received from the contractor indicates completion of the project by December 14, 2017. The contractor has requested extension of contract completion to December 14, 2017. The proposed change order provided to the contractor before the lawsuit was filed by ACE American Insurance Company included provisions for the contractor seeking reimbursement for additional construction management costs incurred by SWC with the builder's risk policy and also SWC agreeing to execute a future no-cost change order extending the substantial completion date to December 14, 2017 contingent on the contractor achieving the substantial completion by that date.

Contract 3-2D Six (6) MGD Water Treatment Plant (WTP) at Dickinson:

The preconstruction conference for Contract 3-2D was held on January 13, 2016 with both the General contractor, John T. Jones Construction Co., Inc., and the Mechanical contractor, Williams Plumbing and Heating, Inc. Bids for Contract 3-2D Electrical Contract were opened on January 28, 2016, and the contract was awarded to Edling Electric, Inc. at the March 3, 2016 meeting.

The General contractor, John T. Jones has completed all of the basement walls and slabs. The first-floor slab is complete with the exception of the slab over the wet well lid. The contractor is working on shoring and decking of the second-floor slab. Precast wall installation has begun. Steel joists and beams are getting installed in the administration area. Rubbing of the basement walls and painting is ongoing.

Two change orders have been signed by all parties on this contract. The net increase in contract price is $38,088, and the intermediate completion date was extended to December 16, 2016, and the substantial completion date extended to November 28, 2017. The milestone completion date is for completing all site piping and completing the backfill against the WTP structure foundation walls. The contractor did not complete the items for the intermediate completion. The intent of the milestone completion date was to allow for some secondary settlement prior to the installation of paving. In order to meet the intent of the milestone completion date, the contractor was asked to complete the remaining areas of backfill at least 100 days prior to placement of

paving. With regards to remaining pipeline installation that are under areas with paving, the contractor was instructed to use trench backfill material classified as fill or structural fill. A certificate of milestone completion was signed by all parties with the contractor agreeing to the above conditions.

The Electrical contractor, Edling Electric, Inc. and the Mechanical contractor, Williams Plumbing and Heating, Inc., are following the General contractor in their work. The Electrical contractor is installing conduits in the basement. The Mechanical contractor is working on HVAC duct installation and fire sprinkler pipe installation.

Contract 4-1F/4-2C Generator Upgrades:

The scope of this contract includes relocating the existing 1000 kW generator at the Dodge pump station to the Dickinson Finished Water Pump Station and installing a new standby engine generator at the Dodge pump station. This contract also includes relocating the existing 1,500 kW generator at the Richardton Pump Station to the intake booster pump station and installing a new generator at the Richardton Pump Station. Bids for this contract were opened on January 28, 2016, and the contract was awarded to Edling Electric, Inc. at the March 3, 2016 meeting. The preconstruction conference for this contract was held on May 19, 2016.

The installation and startup of the generators at all four locations is complete. Testing in late November 2016 was not successful because of programming issues. Changes needed to resolve programming issues that were beyond the scope of the contract were included as a change order to the contract. The SCADA contractor on the Project, Microcomm, will need to be involved to facilitate programming changes in some locations. Two change orders have been executed by all parties on this contract.

Contract 5-1A and 5-2A 2nd Richardton Reservoir and 2nd Dickinson Reservoir:

The SWC at its October 12, 2016 meeting awarded Contract 5-2A, 2nd Dickinson Reservoir, to John T. Jones Construction Co. A preconstruction conference for this contract is scheduled for March 30, 2017.

The SWC at its December 9, 2016 meeting awarded Contract 5-1A, 2nd Richardton Reservoir, to Engineering America, Inc. Contract documents have been executed by all parties.

Raw Water Line Capacity Upgrade:

Design on the 4-mile parallel piping segment between the intake and the OMND Water Treatment plant is mostly complete. Easement acquisitions will begin soon. We anticipate bidding this contract soon.

Condemnation:

Mr. Robert Braun, a landowner on Contract 7-9G BS 1 was condemned for easement in June 2016. We received a notice of appeal for the compensation on July 7, 2016. An email from Mr. Braun's attorney on August 24, 2016 requested $20,542.50 in just compensation for an easement for 4,107 feet of pipeline on Mr. Braun's property. Our field staff reviewed the route again and were able to get the neighboring landowners to remove some trees at their own expense and reroute the pipeline on the neighboring landowner's property. Mr. Braun's attorney has asked that the SWC pay Mr. Braun's attorney's fees of $5,863 based on North Dakota

Century Code § 32-15-35. The payment was made on November 15, 2016.

Transfer of Service Agreements:

At the December 12, 2015 SWC meeting, the Commission approved the Transfer of Service agreement between City of Killdeer, SWA and SWC. This was the first annexation agreement negotiated between a City served by Southwest Pipeline Project and SWA. In early January 2016, SWA mailed similar agreements to 33 communities within the SWPP service area except for City of Dickinson using the same template as used for City of Killdeer. SWA has been negotiating different terms with the City of Dickinson. Some communities executed the agreement, while many communities expressed concerns about terms of the annexation agreement that was mailed to them. SWA continues to meet with the communities to negotiate the terms.

GE:SSP:pdh/1736-99

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MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer-Secretary
SUBJECT: NAWS – Project Update
DATE: March 6, 2017

Supplemental EIS

Reclamation issued the Record of Decision for the Final Supplemental Environmental Impact Statement (FSEIS) for the Northwest Area Water Supply on August 21, 2015. Reclamation received seven comment letters on the FSEIS, which along with point-by-point responses were included as an appendix to the Record of Decision. The Preferred Alternative includes a supply from the Missouri River (Lake Sakakawea) with an intake at Snake Creek Pumping Station along with a conventional treatment option for the Biota Water Treatment Plant near Max. This level of treatment includes five treatment processes versus two from the draft SEIS and the initial Environmental Assessment. Although all biota treatment options were considered sufficient by Reclamation, the conventional treatment option was chosen to address drinking water issues raised by the EPA.

Manitoba & Missouri Lawsuit

A Joint Motion for Entry of Case Management and Scheduling Order was submitted to the District of Columbia District Court December 22, 2015 and accepted with minor modifications December 23, 2015. The plaintiffs filed supplemental Complaints January 29, 2016, and the defendants lodged and served the Administrative Record February 5, 2016. A Motion to Modify Injunction *Pendente Lite* was filed by the State of North Dakota as intervenor defendant March 1, 2016. Oppositions by the plaintiffs were filed April 4, 2016, and a reply was filed April 25, 2016 by the State. The Plaintiffs filed a Motion for Leave to sur-reply May 18, 2016, and an opposition to that motion was filed May 20, 2016, by the State of North Dakota. The Plaintiffs then filed a response to our opposition May 25, 2016, and the Motion for Leave was accepted by the Court May 27, 2016. The Motion for Modification to the Injunction was denied by the Court June 14, 2016. A notice of appeal was filed with the DC Appellate court July 1, 2016. A Statement of Issues for Appeal and Motion to Expedite Appeal were filed August 15th, 2016. A Motion for Summary Affirmance and Opposition to Motion to Expedite Appeal were filed by Manitoba and joined by Missouri August 29, 2016. Opposition to Summary Affirmance was filed September 6, 2016, and a Reply in Motion to Expedite Appeal was filed September 8, 2016. A Reply in Support of the Motion for Summary Affirmance was filed September 22, 2016. The Briefing Schedule was set for the Appeal, the Motion for Summary Affirmance was denied and the Motion to Expedite Appeal was granted September 28th, 2016. The Brief of Merits was filed October 7, 2016 by the Appellants and Brief of Plaintiff-Appellees was filed November 7, 2016. The Reply by the Appellants was filed November 22nd, 2016. Oral arguments were held January 13, 2017 in front of circuit judges Brown and Wilkins and senior circuit judge Edwards. The decision was filed by

circuit judge Brown March 3, 2017 remanding the decision to Judge Collyer with instruction to grant the modification to the injunction. This decision, while a single step in the right direction, is a significant victory for us as it is the first ruling in our favor. There have been six other modifications to the injunction, but this is the first that wasn't consented to or unopposed by the plaintiffs in the case.

Motions for Summary Judgment were originally to be filed by the defendants April 11, 2016 with combined cross-motions/opposition by the plaintiffs due May 13, 2016 and combined oppositions/replies by the defendants due June 17, 2016. However, the briefing schedule was delayed once due to a desire by the federal defendants for additional time for review and a medical issue for the plaintiff's legal counsel and then again for the same medical issue for the plaintiffs' legal counsel. We consented on both requests to delay the briefing but filed a joinder on the second request to ask the court to expedite the judgment on the injunctive relief motion. The Motions for Summary Judgment filed by the defendants June 3, 2016 with combined Opposition/Cross-Motion by the plaintiffs filed July 8, 2016 and combined Reply/Opposition by the defendants filed August 16, 2016. Plaintiffs Manitoba filed a motion for leave to sur-reply September 12th which was accepted by the Court the next day. Motions for Leave to Sur-reply were filed by the defendants September 26, 2016, and a reply by the Plaintiffs was filed October 7, 2016. Oral argument for the cross-motions for summary judgement is scheduled for March 30, 2017, in DC District Court. The first summary judgement in this case was delivered eight months after briefing was completed and four months after oral argument, and the second summary judgement was issued four months after the final briefings. There was no oral argument for the second summary judgement.

NAWS Contract 2-2A-1

Contract 2-2A-1 included furnishing and installing roughly 300 feet of split casing to encase existing pipeline for upcoming road work in the western portion of Minot in 2017. The contract was awarded to Wagner construction in the amount of $763,575 on August 24th. The preconstruction conference was held September 8, 2016. Work commenced October 24th, 2016 and was substantially complete prior to the end of November.

Sundre Aquifer Supply Pipeline

The Sundre raw water supply pipeline from the Sundre aquifer wellfield is currently the major water supply for the Minot water treatment plant and subsequently the NAWS system. The existing Sundre pipeline is 43,300 linear feet in length is comprised of fiberglass pipe installed between 1972 and 1974 and has reached the end of its usable life as it has become very brittle and great care must be taken when any work is performed in its vicinity. This pipeline represents nearly two thirds of the raw water capacity to the Minot treatment plant. Features of the Mouse River Enhanced Food Protection Project will cross the current Sundre pipeline which creates numerous difficulties as design standards for pipelines crossing flood control features are very strict. Additionally, the NDDOT plans to replace the Broadway Bridge in Minot, and the foundation for the new abutment will be immediately adjacent to the existing Sundre pipeline. For all these reasons, the existing Sundre Raw Water Supply Pipeline must be replaced to ensure continuity of service through the coming years. The most logical and least cost alternative is to tie a new pipeline from the Sundre well field in to the existing NAWS 'raw' water line

immediately downstream of the NAWS pressure reducing station approximately four miles south of Minot. This approach would greatly reduce the costs to the City of Minot to replace the existing Sundre line, take advantage of 7.5 miles of currently unused NAWS infrastructure, and provide multiple benefits to the NAWS project in the future. It would also require connecting the existing NAWS line to the Minot water treatment plant, which requires modification of the injunction. This modification was granted by the DC district court February 8, 2017.

GE:TJF:pdh/237-04

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MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele P.E., Chief Engineer – Secretary
SUBJECT: Devils Lake Hydrologic and Outlet Updates
DATE: March 10, 2017

Hydrologic Update

The March 10th Devils Lake water surface elevation is 1450.2 feet. The lake elevation was relatively stable in 2016, but with current conditions projections are for a major rise in the lake elevation in 2017. The most recent forecast predicts a rise of 3 to 4 feet and potentially the largest annual inflow volume recorded in recent history. As a reminder, the record inflow of 595,000 acre-feet occurred in 2011.

The total precipitation recorded at Devils Lake in 2016 was 26.5 inches which is over 5 inches greater than the average since 1991. Wet conditions persisted throughout the fall and the basin entered winter with high soil moisture content. Snowpack and snow water equivalent are at near record levels and the threat for significant, impactful snowmelt flooding is very high for the Devils Lake Basin.

Potential lake levels provided in the National Weather Service long-range probabilistic outlook for the period of February 26, 2017 to September 30, 2017 are provided in the table below. Also shown are the increases in volume and area from the current level to the potential levels.

Probability	**90%**	**50%**	**10%**
Lake Elevation	1452.8 ft.	1453.6 ft.	1454.6 ft.
Lakes Vol. Increase	462,000 ac-ft	618,000 ac-ft	825,000 ac-ft
Lakes Area Increase	26,000 ac	35,000 ac	47,000 ac

Outlet Update

The Devils Lake Outlets are ready for operation in 2017 except for one motor on the West End Outlet. The Josephine number 2 pump (50 cfs) was sent to the GE Denver Service Center for maintenance and repair in December and the motor is expected to be returned in April prior to start-up. If the return is delayed, West Outlet operations could begin at reduced capacity as soon as streamflow in the Upper Sheyenne River allows. Stand Pipes were modified in January to help alleviate the foaming issue that reduced discharge capacity in 2016.

A meeting of the Devils Lake Outlets Management Advisory Committee to discuss 2017 operations has been scheduled for Thursday, May 4, from 1:00 to 4:00PM, in Carrington, North Dakota.

Tolna Coulee Control Structure

As the water level rises in Stump Lake, additional stop logs will be added to the control structure to keep the stop logs approximately 1 foot below the water surface elevation, the stop logs are currently at an elevation of 1449 ft. The natural outlet spill elevation of Stump Lake through Tolna Coulee is approximately 1458 ft.

GE:JK:TD:ph/416-10

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MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer-Secretary
SUBJECT: Missouri River Update
DATE: March 10, 2017

System/Reservoir Status

System volume on March 10 in the six mainstem reservoirs was 57.3 million acre-feet (MAF), 1.2 MAF above the base of flood control. This is 4.4 MAF above the average system volume for the end of February and 0.4 MAF more than last year. The volume of water in the system on March 10, 2011 was 57.7 MAF.

On March 10, Lake Sakakawea was at an elevation of 1838.8 feet, 1.3 feet above the base of flood control. This is 0.7 feet higher than a year ago and 7.8 feet above its average end of February elevation. The minimum end of February elevation was 1806.9 feet in 2007, and the maximum end of February elevation was 1842.8 feet in 1973. The elevation of Lake Sakakawea on March 10, 2011 was 1838.0 feet.

On March 10, the elevation of Lake Oahe was 1608.3 feet, 0.8 feet above the base of flood control. This is 0.4 feet lower than a year ago and 7.7 feet higher than the average end of February elevation. The minimum end of February elevation was 1572.3 feet in 2007, and the maximum end of February elevation was 1611.1 feet in 1996. The elevation of Lake Oahe on March 10, 2011 was 1608.4 feet.

On March 10, the elevation of Fort Peck was 2235.1 feet, which is 1.1 feet above the base of flood control. This is 1.0 feet higher than a year ago and 8.3 feet higher than the average end of February elevation. The minimum end of February elevation was 2196.3 feet in 2007, and the maximum end of February elevation was 2243.5 feet in 1976. The elevation of Fort Peck on March 10, 2011 was 2235.9 feet.

Runoff and Reservoir Forecasts

Warm temperatures melted much of the plains snowpack in the upper Missouri River Basin resulting in above average runoff for the month of February (219 percent of average). On March 6, mountain snowpack in the "Above Fort Peck" reach was 98 percent of average. In the "Fort Peck to Garrison" reach it was 131 percent of average, similar to mountain snowpack conditions on that day in 2011. Typically, 79 percent of the peak mountain snowpack has accumulated by the beginning of March, and it normally peaks in mid-April.

The U.S. Army Corps of Engineers' (Corps) latest 2017 runoff forecast predicts annual runoff above Sioux City to be 29.1 MAF or 115 percent of average. The Corps' most recent reservoir forecast shows that releases from Garrison Dam are predicted to be 14,000 cfs through March and then increased to 22,000 – 26,000 cfs in April and May. Lake Sakakawea is forecasted to peak at elevation 1846.8 feet in July (9.3 feet above base of flood control) with peak releases of approximately 30,000 cfs throughout the summer.

Annual Operating Plan

The Corps will host public meetings in April throughout the basin to update the public on current hydrologic conditions and the planned operation of the system. The meeting in Bismarck will take place on April 12 at Bismarck State College. The State Water Commission will be providing comments.

Missouri River Recovery Implementation Committee (MRRIC)

Section 5018 of the 2007 Water Resources Development Act (WRDA) authorized the Missouri River Recovery Implementation Committee (MRRIC). The Committee is to make recommendations and provide guidance on activities of the Missouri River Recovery Program (MRRP). MRRIC has nearly 70 members representing local, state, tribal, and federal interests throughout the Missouri River Basin. The representatives for the State of ND on MRRIC are John Paczkowski (primary) and Laura Ackerman (alternate).

The Corps released for public comment on December 16 their Missouri River Recovery Management Plan and Environmental Impact Statement (MRRMP-EIS). The MRRMP-EIS evaluates a range of alternatives for the purposes of avoiding jeopardy to species on the Missouri River protected under the Endangered Species Act, specifically the threatened piping plover and endangered least tern and pallid sturgeon.

The Preferred Alternative (PA), as identified in the MRRMP-EIS, includes mechanical construction of habitat for the piping plover, least tern, and pallid sturgeon. In North Dakota, this would include the construction of new or maintenance of existing emergent sandbar habitat on the Garrison Reach. The PA also includes a one-time flow test for the pallid sturgeon spawning cue if naturally high flow does not occur on the Missouri River within about the next ten years. This one-time flow test would require a deviation from or change in the Master Manual.

The comment period for the MRRMP-EIS ends on April 24. The State Water Commission, through the State of ND's MRRIC representatives, is currently coordinating comments with other state agencies.

Water Supply Rule

On December 16, the Corps released their proposed Water Supply Rule for public comment (comment period ends on May 15). The proposed rule pertains to the use of Corps reservoirs for domestic, municipal, and industrial water supply. It attempts to define how the Corps would require users to enter into storage contracts and be charged for the use of water for those purposes. The main issue with the proposed rule is that it is fundamentally flawed because of the Corps' misunderstanding of state versus federal jurisdictions with respect to water appropriation and western water law, and its interpretation of the 1944 Flood Control Act. The proposed rule does not recognize states' rights to allocate water and interferes with states' sovereign rights.

GE:LCA:pdh/1392

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MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer-Secretary
SUBJECT: Spring Flooding Outlook
DATE: March 10, 2017

After the very heavy snowfalls of early winter, many areas of the State have benefitted from optimal melt conditions and flooding risks are much lower than previously expected. Conditions on the Missouri River and Devils Lake are addressed in the reports on those basins, so this memo will focus on the other areas of the State. All these forecasts are from the NWS AHPS system. They are based on current conditions with expected precipitation through June.

The most serious flood risks persist in the northeast part of the State.

Pembina River:

Neche – 90 percent chance of major flood stage
Walhalla – 90 percent chance of minor flood stage

Park River:

Grafton – 50 percent chance of major flood stage

Forest River:

Minto – 25 percent to 50 percent chance minor flood stage

Goose River:

No flooding is forecast.

Sheyenne River:

Valley City – 25 percent to 50 percent chance of minor flood stage
Lisbon – 10 percent to 25 percent chance of moderate flood stage
Kindred – 10 percent chance of major flood stage
West Fargo Diversion – 10 percent chance of major flood stage
Harwood – 10 percent chance of moderate flood stage

Wild Rice River:

Abercrombie – 10 percent chance of moderate flood stage

Red River Mainstem:

Wahpeton – 25 percent chance of minor flood stage
Hickson – No flooding forecast
Fargo – 10 percent to 25 percent chance of moderate flood stage
Grand Forks – 10 percent to 25 percent chance of moderate flood stage
Oslo – 25 percent to 50 percent chance of moderate flood stage
Drayton – 10 percent to 25 percent chance of moderate flood stage
Pembina – 10 percent to 25 percent chance of major flood stage

Mouse River:

The International Souris River Board met in late February and was informed that volumes in the upper basin were approximately equal to a 15 year return period. This places the reservoir operation plan in flood control mode. Forecasts for stations in North Dakota are as follows.

Sherwood – 10 percent to 25 percent chance of minor flood stage
Minot – 10 percent to 24 percent chance of moderate flood stage
Logan – 25 percent to 50 percent chance of minor flood stage
Sawyer – less than 10 percent
Velva – 10 percent to 25 percent chance of minor flood stage

James River:

No flooding forecast

Apple Creek: 25 percent chance of moderate flood stage

Beaver Creek:

Linton – 10 percent to 25 percent chance of minor flood stage

Knife River:

Hazen – 10 percent to 25 percent chance of minor flood stage

Heart River:

No flooding forecast.

Little Missouri River:

No flooding forecast.

GE:JTF:pdh/1974

Agenda Item 2)

North Dakota State Water Commission

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MEMORANDUM

TO: Governor Doug Burgum
North Dakota Water Commission Members
FROM: Garland Erbele P.E., Chief Engineer-Secretary
SUBJECT: Financial Updates
DATE: June 1, 2017

1. Agency Program Budget Expenditures

Attached is an expenditure spreadsheet for the biennium through April 30, 2017. With only two special line items, Administrative and Support Services and Water and Atmospheric Resources Expenditures, our legislatively approved budget does not contain specific amounts for Salaries, Operations, and Grants and Contracts. In order to manage the Division budgets, we have allocated dollar amounts to each of these categories, however, division managers have the ability to shift dollars from one category to another (see page 2.)

The Project Summary spreadsheet summarize information on the committed and uncommitted funds from the Resources Trust Fund and the Water Development Trust Fund (see page 3.) A detailed breakdown of the individual projects follow on pages 4 through 9. The current Project Summary spreadsheet shows approved projects totaling $914,428,318 with expenditures of $481,522,537. A balance of $110,579,807 remains available to commit to projects in the 2015-2017 biennium.

2. 2015 – 2017 Resources Trust Fund and Water Development Trust Fund Revenues

Oil extraction tax deposits into the Resources Trust Fund total $219,893,743 through May 2017 and are currently $19,432,637 below originally budgeted revenues. Using revised forecast figures, the projected oil extraction income for the biennium will be short at the end of the biennium by $29,351,757.

Deposits into the Water Development Trust Fund total $18,208,436 through May 2017 and are currently $298,436 or 1.7% above budgeted revenues.

STATE WATER COMMISSION
ALLOCATED PROGRAM EXPENDITURES
FOR THE PERIOD ENDED APRIL 30, 2017
BIENNIUM COMPLETE: 92%

PROGRAM	SALARIES/ BENEFITS	OPERATING EXPENSES	GRANTS & CONTRACTS	23-May-17 PROGRAM TOTALS
ADMINISTRATION				
Allocated	2,729,489	2,806,129		5,535,618
Expended	2,434,386	1,657,862		4,092,248
Percent	89%	59%		74%
			General Fund:	0
			Federal Fund:	82,370
			Special Fund:	4,009,878
PLANNING AND EDUCATION				
Allocated	1,472,573	352,990		1,825,563
Expended	1,339,421	200,251		1,539,672
Percent	91%	57%		84%
			General Fund:	0
			Federal Fund:	227,287
			Special Fund:	1,312,384
WATER APPROPRIATION				
Allocated	5,762,691	1,185,300	1,372,844	8,320,835
Expended	4,988,684	753,082	960,059	6,701,825
Percent	87%	64%	70%	81%
			General Fund:	0
			Federal Fund:	59,429
			Special Fund:	6,642,397
WATER DEVELOPMENT				
Allocated	4,713,717	10,742,500	1,562,500	17,018,717
Expended	4,049,833	7,023,479	825,880	11,899,192
Percent	86%	65%	53%	70%
			General Fund:	0
			Federal Fund:	180,516
			Special Fund:	11,718,676
STATEWIDE WATER PROJECTS				
Allocated			959,003,567	959,003,567
Expended			398,300,626	398,300,626
Percent			42%	42%
			General Fund:	0
			Federal Fund:	0
			Special Fund:	398,300,626
REGULATORY DIVISION				
Allocated	2,828,565	2,947,500	15,000	5,791,065
Expended	2,128,987	1,125,913	0	3,254,901
Percent	75%	38%	0%	56%
			General Fund:	0
			Federal Fund:	1,335,793
			Special Fund:	1,919,108
ATMOSPHERIC RESOURCE				
Allocated	1,107,158	743,382	4,885,212	6,735,752
Expended	930,783	372,467	1,372,944	2,676,194
Percent	84%	50%	28%	40%
			General Fund:	0
			Federal Fund:	0
			Special Fund:	2,676,194
SOUTHWEST PIPELINE				
Allocated	512,995	10,461,744	97,502,498	108,477,237
Expended	582,380	9,186,183	51,271,629	61,040,191
Percent	114%	88%	53%	56%
			General Fund:	0
			Federal Fund:	3,000,000
			Special Fund:	58,040,191
NORTHWEST AREA WATER SUPPLY				
Allocated	705,632	13,910,277	31,611,573	46,227,482
Expended	548,999	3,442,654	1,551,604	5,543,258
Percent	78%	25%	5%	12%
			General Fund:	0
			Federal Fund:	0
			Special Fund:	5,543,258
PROGRAM TOTALS				
Allocated	19,832,820	43,149,822	1,095,953,194	1,158,935,836
Expended	17,003,473	23,761,893	454,282,741	495,048,107
Percent	86%	55%	41%	43%

STATE WATER COMMISSION
PROJECT SUMMARY
2015-2017 BIENNIUM

Apr-17

	BUDGET	SWC/SE APPROVED	OBLIGATIONS EXPENDITURES	REMAINING UNOBLIGATED	REMAINING UNPAID
FLOOD CONTROL					
FARGO	228,506,200	228,506,200	143,211,205	0	85,294,995
GRAFTON	33,925,000	33,925,000	1,750,000	0	32,175,000
MOUSE RIVER FLOOD CONTROL	42,533,741	42,533,741	10,813,970	0	31,719,771
VALLEY CITY	28,458,354	27,312,537	10,416,979	1,145,817	16,895,558
LISBON	15,227,187	11,694,752	5,366,351	3,532,435	6,328,401
FORT RANSOM	225,000	0	0	225,000	0
WILLISTON	7,000,000	3,655,517	0	3,344,483	3,655,517
RENWICK DAM	21,154	7,117	7,117	14,037	0
MISSOURI RIVER FLOOD CONTROL	4,000,000	4,000,000	4,000,000	0	0
FLOODWAY PROPERTY ACQUISITIONS					
MINOT	27,858,972	27,858,972	17,883,486	0	9,975,486
WARD COUNTY	6,046,590	6,046,590	31,243	0	6,015,347
VALLEY CITY	4,017,403	4,017,403	1,321,476	0	2,695,927
BURLEIGH COUNTY	232,649	(114,552)	(114,552)	347,201	0
SAWYER	184,260	184,260	48,416	0	135,844
LISBON	626,250	626,250	22,950	0	603,300
BURLINGTON	45,516	45,516	43,350	0	2,166
STATE WATER SUPPLY					
REGIONAL & LOCAL WATER SYSTEMS	184,760,694	182,922,878	73,186,780	1,837,816	109,736,097
FARGO WATER TREATMENT PLANT	22,768,775	22,768,775	22,740,900	0	27,875
SOUTHWEST PIPELINE PROJECT	104,761,201	104,761,200	58,040,191	0	46,721,009
NORTHWEST AREA WATER SUPPLY	15,754,482	15,754,482	2,861,146	0	12,893,335
WESTERN AREA WATER SUPPY AUTHORITY	82,201,384	82,201,384	70,564,448	0	11,636,936
RED RIVER VALLEY WATER SUPPLY	12,521,328	12,521,328	10,032,845	0	2,488,483
CENTRAL NORTH DAKOTA WATER SUPPLY	70,070,800	70,800	69,804	70,000,000	997
UNOBLIGATED STATE WATER SUPPLY	2,156,155			2,156,155	
GENERAL WATER MANAGEMENT					
OBLIGATED	55,408,046	55,408,046	22,706,071	0	32,701,975
UNOBLIGATED GENERAL WATER	17,517,960			17,517,960	
DEVILS LAKE					
OUTLET	870,802	870,802	0	0	870,802
OUTLET OPERATIONS	18,534,211	18,534,210	7,473,296	0	11,060,914
DL EAST END OUTLET	2,774,011	2,774,011	505,355	0	2,268,656
REVOLVING LOAN FUND					
GENERAL WATER PROJECTS	11,000,000	10,574,214	5,892,314	425,786	4,681,900
WATER SUPPLY	25,000,000	14,966,885	12,647,395	10,033,115	2,319,490
TOTALS	1,025,008,125	914,428,318	481,522,537	110,579,807	432,905,781

STATE WATER COMMISSION
PROJECT SUMMARY
2015-2017 Biennium

PROGRAM OBLIGATION

Approved By	SWC No	Dept	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	Apr-17 Balance
				Flood Control:				
SB 2020	1928-01	5000	City of Fargo	Fargo Flood Control Project	6/23/2009	99,506,200	72,586,161	26,920,039
SB 2020	1928-02	5000	City of Fargo	Interior Flood Control Project	12/11/2015	30,000,000	30,000,000	0
SB 2020	1928-03	5000	City of Fargo	Interior Disaster Relief Fund	12/11/2015	30,000,000	30,000,000	0
SB 2020	1928-05	5000	Metro Flood Diversion Authority	Fargo Metro Flood Diversion Authority 2015-2017	7/6/2016	69,000,000	10,625,044	58,374,956
	1771-01	5000	City of Grafton	Grafton Flood Control Project	10/12/2016	32,175,000	0	32,175,000
	1771-02	5000	City of Grafton	Grafton Flood Risk Reduction Project	12/5/2014	1,750,000	1,750,000	0
	1974-06	5000	Souris River Joint WRD	Development of 2011 Flood Inundation Maps	12/18/2015	5,600	4,078	1,522
SB 2371	1974-08	5000	Souris River Joint WRD	Mouse River Reconnaissance Study to Meet Fed Guid	2/15/2013	0	0	0
	1974-09	5000	Souris River Joint WRD	Mouse River Flood Control Design Engineering	8/8/2016	7,317,512	6,834,570	482,942
	1974-11	5000	Souris River Joint WRD	Funding of 214 agreement between SRJB & USACE	12/5/2014	106,500	75,000	31,500
	1974-14	5000	Souris River Joint WRD	StARR Program (Structure Acquisition, Relocation, or F	3/9/2016	7,200,000	1,088,907	6,111,093
	1974-15	5000	Souris River Joint WRD	Perkett Ditch Improvements	12/2/2016	2,188,592	1,149,107	1,039,485
	1974-16	5000	Souris River Joint WRD	Corps of Engineers Feasibility Study MREFPP	12/9/2016	750,000	279,096	470,904
	1974-18	5000	Souris River Joint WRD	Rural Reaches, Preliminary Engineering	10/12/2016	260,000	12,193	247,807
	1974-19	5000	Souris River Joint WRD	4th Avenue Tieback Levee & Burlington Levee - Desig	10/12/2016	3,900,000	506,253	3,393,747
	1974-20	5000	Souris River Joint WRD	Utility Relocations	10/12/2016	467,057	45,023	422,034
	1974-21	5000	Souris River Joint WRD	Highway 83 Bypass & Bridge Replacement	10/12/2016	1,983,623	0	1,983,623
	1974-22	5000	Souris River Joint WRD	Broadway Pump Station	3/29/2017	15,197,000	0	15,197,000
	1974-23	5000	Souris River Joint WRD	Peterson Coulee Outlet	3/29/2017	1,427,022	0	1,427,022
	1974-24	5000	Souris River Joint WRD	Independent Peer Review Phases BU-1 & MI-5	3/29/2017	171,909	0	171,909
	1758	5000	Souris River Joint WRD-no agreement	International Joint Commission Study Board	5/29/2014	302,500	0	302,500
	1993-01	5000	City of Minot	Downtown Infrastructure Improvements	9/15/2014	1,256,426	819,743	436,683
SB 2371	1344-01	5000	Valley City	Sheyenne River Valley Flood Control Project	12/5/2015	156,993	156,993	0
	1344-04	5000	Valley City	Sheyenne River Valley Flood Control Project PHII	8/29/2016	1,147,500	966,962	180,538
	1504-01	5000	Valley City	Permanent Flood Protection Project	12/5/2014	9,850,444	9,293,024	557,420
	1504-02	5000	Valley City	Permanent Flood Protection Project (LOAN)	12/5/2014	3,000,000	0	3,000,000
	1504-03	5000	Valley City	Permanent Flood Protection PH III	12/9/2016	13,157,600	0	13,157,600
SB 2371	1344-02	5000	City of Lisbon	Sheyenne River Valley Flood Control Project	8/8/2016	2,281,610	587,647	1,693,963
	1991-01	5000	City of Lisbon	Permanent Flood Protection Project	5/29/2014	561,702	414,733	146,969
	1991-03	5000	City of Lisbon	Permanent Flood Protection - Levee C Project	3/11/2015	3,153,440	2,775,641	377,799
	1991-06	5000	City of Lisbon	Permanent Flood Protection - Levee E Project	3/9/2016	2,098,000	1,588,330	509,670
	1991-08	5000	City of Lisbon	Permanent Flood Protection - Levee D Project	3/29/2017	3,600,000	0	3,600,000
SB 2371	1344-03	5000	Fort Ranson	Sheyenne River Valley Flood Control Project	6/19/2013	0	0	0
	849	5000	Pembina Co. WRD	Renwick Dam Rehabilitation	6/26/2014	7,117	7,117	0
SB 2020	1992-02	5000	Burleigh Co. WRD	Missouri River Correctional Center	9/21/2015	1,200,000	1,200,000	0
SB 2020	1992-03	5000	Burleigh Co. WRD	Fox Island Flood Control Funding Update	9/21/2015	2,800,000	2,800,000	0
	2079	5000	City of Williston	West Williston Flood Control	12/9/2016	3,655,517	0	3,655,517
				Subtotal Flood Control		***351,634,884***	***175,565,622***	***176,069,242***
				Floodway Property Acquisitions:				
	1993-05	5000	City of Minot	Minot Phase 2 - Floodway Acquisitions	3/29/2017	27,858,972	17,883,486	9,975,486
SB 2371	1523-05	5000	Ward County	Ward County Phase 1, 2 & 3 - Floodway Acquisitions	1/27/2012	6,046,590	31,243	6,015,347
SB 2371	1504-05	5000	ValleyCity	Valley City Phase 1 - Floodway Acquisitions	8/29/2016	4,017,403	1,321,476	2,695,927
SB 2371	1992-05	5000	Burleigh Co. WRD	Burleigh Co. Phase 1 - Floodway Acquisitions	3/7/2012	(114,552)	(114,552)	0
SB 2371	2000-05	5000	City of Sawyer	Sawyer Phase 1 - Floodway Acquisitions	6/13/2012	184,260	48,416	135,844
	1991-05	5000	City of Lisbon	Lisbon - Floodway Acquisition	12/9/2016	626,250	22,950	603,300
	1987-05	5000	City of Burlington	Mouse River Enhanced Flood Plan Property Acquistion	5/10/2017	45,516	43,350	2,166
				Subtotal Floodway Property Acquisitions		***38,864,439***	***19,236,369***	***19,428,070***
				State Water Supply Grants:				
	2373-35	5000	Grand Forks - Traill RWD	Grand Forks - Traill County WRD	6/13/2012	303,715	303,715	0
	2373-36	5000	Stutsman Rural RWD	Stutsman Rural Water System - Phase IIB, III	2/27/2013	4,443,172	4,443,172	0
	2373-38	5000	Stutsman Rural RWD	Kidder Co & Carrington Area Expansion	7/23/2013	1,287,861	1,287,861	0
	2373-39	5000	North Central Rural Water Consortium	Carpio Berthold Phase 2	5/29/2014	2,970,141	534,051	2,436,091
	2373-41	5000	North Central Rural Water Consortium	Granville-Deering Area	10/24/2016	5,940,102	3,494,322	2,445,779
	2050-01	5000	Missouri West Water System	South Mandan	3/17/2014	168,606	168,606	0
	2050-02	5000	Grand Forks Traill RWD	Improvements	3/11/2015	4,369,058	3,816,605	552,453
	2050-03	5000	Northeast Regional WD	Langdon RWD - ABM Pipeline Phase 1	10/7/2013	540,437	540,437	0
	2050-04	5000	Northeast Regional WD	Langdon RWD - North Valley Nekoma	3/11/2015	859,341	859,341	0
	2050-05	5000	Northeast Regional WD	North Valley WD - ABM Pipeline Phase 1	3/11/2015	240,672	240,672	0
	2050-06	5000	Northeast Regional WD	North Valley WD - 93 Street	3/11/2015	937,870	937,870	0
	2050-07	5000	Northeast Regional WD	North Valley WD - Rural Expansion	5/29/2014	1,657,591	1,605,795	51,796
	2050-08	5000	Walsh RWD	Ground Storage	10/7/2013	169,977	169,977	(0)
	2050-09	5000	City of Park River	Water Tower	3/11/2015	571,225	571,225	0
	2050-10	5000	City of Surrey	Water Supply Improvements	10/7/2013	1,117,800	1,117,800	0
	2050-11	5000	Cass RWD	Phase 2 Plant Improvements	10/7/2013	3,951,363	3,951,363	0
	2050-13	5000	City of Mandan	New Raw Water Intake	10/7/2013	1,567,676	49,788	1,517,888
	2050-14	5000	City of Mandan	Water Treatment Plant Improvements	10/7/2013	226,762	226,762	0
	2050-15	5000	City of Washburn	New Raw Water Intake	10/7/2013	2,334,250	18,776	2,315,474
	2050-16	5000	Tri-County RWD	Improvements	10/7/2013	845,000	845,000	0
	2050-17	5000	Barnes Rural RWD	Improvements	3/11/2015	6,894,412	5,243,704	1,650,708
	2050-18	5000	City of Grafton	Water Treatment Plant Phase 3	10/7/2013	3,381,148	2,564,805	816,343
	2050-19	5000	City of Grand Forks	Water Treatment Plant Improvements	10/7/2013	3,849,151	3,849,151	0
	2050-20	5000	City of Dickinson	Capital Infrastructure	10/6/2015	9,875,025	7,510,749	2,364,276
	2050-21	5000	Watford City	Capital Infrastructure	2/27/2014	1,897,040	1,343,327	553,713
	2050-22	5000	City of Williston	Capital Infrastructure	2/27/2014	2,281,794	2,281,794	0
	2050-23	5000	Greater Ramsey WRD	SW Nelson County Expansion	3/17/2014	4,199,547	3,370,230	829,317
	2050-24	5000	All Seasons Water District	System 1 Well Field Expansion	9/15/2014	292,500	0	292,500
	2050-25	5000	All Seasons Water District	Bottineau County Extension, Phase I	7/29/2015	896,000	562,571	333,429
	2050-26	5000	City of Fargo	Fargo Water System Regionalization Improvements	7/29/2015	6,841,750	2,420,406	4,421,344
	2050-27	5000	City of Tioga	Tioga Water Supply Improvement Project	7/29/2015	2,190,000	1,914,381	275,619
	2050-28	5000	City of Mandan	Water Systems Improvement Project	10/6/2015	2,582,535	111,904	2,470,631
	2050-29	5000	City of Minot	Water Systems Improvement Project	10/6/2015	3,634,000	78,477	3,555,523
	2050-30	5000	Watford City	Water Systems Improvement Project	10/6/2015	5,435,087	60,324	5,374,763
	2050-31	5000	City of West Fargo	Water Systems Improvement Project	10/6/2015	3,426,210	2,169,751	1,256,459
	2050-32	5000	City of Williston	Water Systems Improvement Project	10/6/2015	10,890,472	3,033,462	7,857,010
	2050-33	5000	Stutsman RWD	Phase V Storage & Pipeline Expansion Project	10/6/2015	4,170,100	2,633,295	1,536,805
	2050-34	5000	North Prairie RWD	Storage and Water Main	10/6/2015	3,459,837	1,367,453	2,092,384
	2050-35	5000	Southeast Water Users Dist	System Wide Expansion Feasibility Study	10/6/2015	11,826,000	401,943	11,424,057
	2050-36	5000	City of Dickinson	Water Systems Improvement Project	10/6/2015	1,042,500	347,145	695,355
	2050-37	5000	City of Dickinson	Dickinson State Avenue South Water Main	12/11/2015	965,000	0	965,000
	2050-38	5000	Dakota Rural Water District	Reservoir C Expansion	12/11/2015	901,500	804,066	97,434
	2050-39	5000	Missouri West Water System	Crown Butte Service Area Expansion Phase II	12/11/2015	308,000	146,094	161,906
	2050-41	5000	Northeast Regional WD	City of Devils Lake Water Supply Project	12/11/2015	15,543,750	1,356,864	14,186,886
	2050-42	5000	Walsh RWD	Phase 1 & 2 System Expansion	12/11/2015	2,093,350	172,052	1,921,298
	2050-43	5000	All Seasons Water District	System 4 Connection to System 1	12/11/2015	4,900,000	0	4,900,000
	2050-44	5000	City of Beulah	Water Treatment Plant	3/9/2016	2,640,000	374,272	2,265,728
	2050-45	5000	Garrison Rural Water District	System Expansion Project	3/9/2016	2,003,550	76,952	1,926,598
	2050-49	5000	City of Grand Forks	Grand Forks Water Treatment Plant	10/12/2016	30,000,000	3,808,470	26,191,530
				Subtotal State Water Supply		***182,922,878***	***73,186,780***	***109,736,097***

STATE WATER COMMISSION
PROJECT SUMMARY
2015-2017 Biennium

PROGRAM OBLIGATION

Approved By	SWC No	Dept	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Apr-17* Balance
	1984-02	5000	City of Fargo	Fargo Water Treatment Plant	3/17/2014	22,768,775	22,740,900	27,875
	1736-05	8000	SWPP	Southwest Pipeline Project	7/1/2013	104,761,200	58,040,191	46,721,009
	2374	9000	NAWS	Northwest Area Water Supply	7/1/2013	15,754,482	2,861,146	12,893,335
	1973-02	5000	WAWSA	WAWSA- (GRANT)	10/6/2015	12,061,806	11,479,100	582,706
	1973-05	5000	WAWSA	WAWSA- (GRANT)	10/6/2015	60,000,000	48,945,769	11,054,231
	1973-03	5000	Bank of North Dakota	WAWSA - (LOAN)	10/6/2015	10,139,578	10,139,578	0
	325-102	5000	RRVWSP	Red River Valley Water Supply - Intake Design Study	5/29/2014	162,328	32,845	129,483
SB 2020	325-104	5000	Garrison Diversion	Red River Valley Water Supply Project	7/29/2015	12,359,000	10,000,000	2,359,000
	2051-101	5000	Central ND Water Supply	Black and Veatch investigation	1/27/2015	70,800	69,804	997
				Subtotal State Water Supply		***238,077,969***	***164,309,334***	***73,768,635***
				General Water Management				
				Hydrologic Investigations:		***1,125,267***		
	2041	3000	US Geological Survey	USGS Stream Gage Joint Funding Agreement	3/9/2016	529,075	529,075	0
	2041	3000	US Geological Survey	USGS Stream Gage Joint Funding Agreement	10/12/2016	544,110	272,055	272,055
	1400	3000	Fireside Office Solutions	Document Conversion (Water Permit Scanning)	8/23/2016	50,000	16,305	33,695
				Hydrologic Investigations Obligations Subtotal		***1,123,185***	***817,435***	***305,750***
				Remaining Hydrologic Investigations Authority		***2,082***		
				Hydrologic Investigations Authority Less Payments				
				General Projects Obligated		***38,273,178***	***8,585,486***	***29,687,692***
				General Projects Completed		***16,009,601***	***13,303,150***	***2,706,451***
				Subtotal General Water Management		***55,408,046***	***22,706,071***	***32,701,975***
				Devils Lake Basin Development:				
SWC	416-07	5000	Multiple	Devils Lake Outlet	7/1/2013	870,802	0	870,802
SWC	416-10	4700	Operations	Devils Lake Outlet Operations	3/9/2016	18,534,210	7,473,296	11,060,914
SWC	416-15	5000	Multiple	DL East End Outlet	7/1/2013	2,774,011	505,355	2,268,656
				Devils Lake Subtotal		***22,179,023***	***7,978,651***	***14,200,372***
				Revolving Loan Fund:				
			(General Water)					
	2077-02	1050	City of Lisbon	Permanent Flood Protection - Levee C (LOAN)	3/11/2015	886,500	886,500	0
	2077-03	1050	City of Lisbon	Sheyenne River Flood Protection - Levee E (LOAN)	3/9/2016	527,000	527,000	0
	2077-09	1050	City of Lisbon	Permanent Flood Protection - Levee D & F (LOAN)	7/6/2016	243,200	243,200	0
	2077-08	1050	City of Grafton	Grafton Flood Risk Reduction (LOAN)	10/12/2016	3,375,000	3,375,000	0
	2077-06	1050	City of Valley City	Permanent Flood Protection Project (LOAN)	12/28/2016	860,614	860,614	0
	2077	1050	City of Valley City	Valley City Flood Protection - Phase II Construction (LC	12/9/2016	3,289,400	0	3,289,400
	2077	1050	City of Valley City	Valley City Pre Design & Eng & Phase III Buyouts (LOA	12/9/2016	1,392,500	0	1,392,500
			(Water Supply)					
	2077-01	1050	Bank of North Dakota	WAWSA - (LOAN)	10/6/2015	10,000,000	10,000,000	0
	2077-04	1050	North Prairie Rural Water District	Storage & Water Mains (LOAN)	12/11/2015	239,475	239,475	0
	2077	1050	City of Beulah	Water Treatment Plant (LOAN)	3/9/2016	880,000	0	880,000
	2077-05	1050	Northeast Regional WD	City of Devils Lake Water Supply Project (LOAN)	3/9/2016	1,686,920	1,686,920	0
	2077	1050	Walsh Rural WD	Phase 1, 2, & 3 System Expansion Project (LOAN)	3/9/2016	250,490	0	250,490
	2077	1050	Barnes Rural Water District	Rural Expansion (LOAN)	10/12/2016	835,000	0	835,000
	2077	1050	North Central Rural Water Consortium	Carpio Berhold Phase 2 (LOAN)	10/12/2016	215,000	0	215,000
	2077	1050	North Central Rural Water Consortium	Granville-Surrey-Deering Water Supply Project (LOAN)	10/12/2016	139,000	0	139,000
	2077-07	1050	Slutsman Rural Water District	Phase 3 Expansion (LOAN)	10/12/2016	721,000	721,000	0
				Revolving Loan Fund Subtotal		***25,541,099***	***18,539,709***	***7,001,390***
				TOTAL		***914,428,318***	***481,522,537***	***432,905,781***

STATE WATER COMMISSION
PROJECT SUMMARY
2015-2017 Biennium
Resources Trust Fund

GENERAL PROJECT OBLIGATIONS

Approved By	SWC No	Dept	Approved Biennum	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Apr-17* Balance
SE	274	5000	2015-17	City of Neche	Neche Levee Certification Project	3/21/2016	54,000	0	54,000
SWC	322	5000	2009-11	ND Water Education Foundati	ND Water: A Century of Challenge	2/22/2010	36,800	0	36,800
SWC	346	5000	2015-17	Williams County WRD	Epping Dam Spillway Reconstruction	3/29/2017	846,134	544,657	301,477
SWC	347	5000	2009-11	City of Velva	City of Velva's Flood Control Levee System Certificatic	3/28/2011	102,000	69,503	32,497
SE	390	5000	2015-17	Logan County WRD	Beaver Lake Dam Rehabilitation Feasibility Study	6/8/2016	16,076	0	16,076
SE	394	5000	2015-17	Golden Valley Co WRD	Odland Dam Rehabilitiation Feasibility Study	10/13/2016	13,220	0	13,220
SE	399	5000	2013-15	Barnes Co WRD	Kathryn Dam Feasibility Study	9/19/2014	21,250	8,508	12,742
SE	420	5000	2015-17	Hettinger Park Board	Mirror Lake Dam Emergency Action Plan	12/2/2016	24,400	0	24,400
SE	460	5000	2015-17	Griggs Co. WRD	Ueland Dam Rehabilitation Feasibility Study	5/20/2016	17,500	0	17,500
SE	477	5000	2015-17	Valley City	Mill Dam Rehabilitation Feasibilty Study	6/8/2016	15,073	0	15,073
SE	512	5000	2015-17	Emmons County WRD	Nieuwsma Dam Emergency Action Plan	11/28/2016	12,000	4,468	7,532
SE	531	5000	2015-17	Benson Co WRD	Bourel Dam Rehabilitiation Feasibilitly Study	10/11/2016	12,118	0	12,118
SE	561	5000	2015-17	City of Tioga	Tioga Dam EAP	5/20/2016	40,000	0	40,000
SWC	568	5000	2013-15	Southeast Cass WRD	Sheyenne River Reaches Snagging & Clearing Projec	12/5/2014	94,238	0	94,238
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches I	12/11/2015	99,000	25,098	73,902
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches II	12/11/2015	105,000	77,095	27,905
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches III	12/11/2015	90,000	2,965	87,035
SWC	568	5000	2015-17	Southeast Cass WRD	Sheyenne River Snagging & Clearing Reaches I,II,III	12/9/2016	294,000	0	294,000
SE	568	5000	2015-17	Barnes Co WRD	Sheyenne River Snagging & Clearing Reach 1 Proj 2	5/9/2017	74,000	0	74,000
SE	571	5000	2013-15	Oak Creek WRD	Oak Creek Snagging & Clearing Project	3/30/2015	3,672	2,565	1,107
SWC	620	5000	2007-09	Lower Heart WRD	Mandan Flood Control Protective Works (Levee)	9/29/2008	125,396	0	125,396
SE	662	5000	2015-17	Walsh Co. WRD	Park River Snagging & Clearing	2/17/2017	55,385	0	55,385
SE	662	5000	2015-17	Walsh Co. WRD	Park River Snagging & Clearing	5/10/2017	50,228	29,264	20,964
SWC	710	5000	2015-17	Maple River WRD	Upper Swan Creek Channel Improvement Project	10/6/2015	171,763	109,702	62,061
SE	841	5000	2013-15	Maple River WRD	Garsteig Dam Repair Project	1/26/2015	40,163	21,502	18,661
SE	848	5000	2015-17	Sargent Co WRD	Tewaukon WS-T-1-A (Brummond-Lubke) Dam EAP	12/18/2015	20,000	7,984	12,016
SE	848	5000	2015-17	Sargent Co WRD	Tewaukon WS-T-7 (Nelson) Dam EAP	12/18/2015	20,000	7,820	12,180
SE	849	5000	2015-17	Pembina Co. WRD	Renwick Dam Emergency Action Plan	9/29/2015	63,680	56,784	6,896
SWC	980	5000	2015-17	Cass Co. Joint WRD	Rush River Watershed Detention Study	1/7/2016	154,000	23,269	130,731
SWC	980	5000	2013-15	Cass Co. Joint WRD	Swan Creek Watershed Detention Study PHII	3/11/2015	154,000	28,287	125,713
SWC	980	5000	2015-17	Cass Co. Joint WRD	Upper Maple River Watershed Detention Study	1/11/2016	154,000	20,885	133,115
SWC	1056	5000	2015-17	Bottineau Co. WRD	Tacoma Bitz Legal Drain	7/6/2016	312,105	58,097	254,008
SE	1056	2000	2015-17	Bottineau Co. WRD	Stead Legal Drain	2/16/2017	19,142	0	19,142
SWC	1064	5000	2013-15	Rush River WRD	Cass County Drain No. 2 Channel Improvements Proj	3/11/2015	106,989	65,306	41,683
SWC	1070	5000	2015-17	Maple River WRD	Drain #14 Channel Improvements	3/29/2017	741,562	0	741,562
SWC	1071	5000	2015-17	Maple River WRD	Cass County Drain #15 Channel Improvements	3/9/2016	296,562	0	296,562
SWC	1088	5000	2015-17	Maple River WRD	Cass Drain #37 Channel Improvements	3/9/2016	230,326	0	230,326
SWC	1089	5000	2015-17	Maple River WRD	Cass County Drain #39 Channel Improvements	3/9/2016	221,871	0	221,871
SE	1180	5000	2015-17	Richland Co WRD	Legal Drain No. 7 Channel Improvements	5/11/2017	24,926	0	24,926
SWC	1101	5000	2011-13	Dickey Co. WRD	Yorktown-Maple Drainage Improvement Dist No. 3	12/11/2015	798,562	0	798,562
SWC	1101	5000	2011-13	Dickey-Sargent Co WRD	Riverdale Township Improvement District #2 - Dickey	9/21/2011	500,000	0	500,000
SE	1140	5000	2015-17	Pembina Co. WRD	Drain 11 Outlet Extension Cost Overrun Project	7/7/2015	5,088	0	5,088
SWC	1174	5000	2015-17	Richland Co. WRD	Legal Drain #31 Improvements Project	3/9/2016	161,852	128,498	33,354
SWC	1176	5000	2015-17	Richland Co. WRD	Legal Drain #2 Reconstruction/Extension Project	3/9/2016	535,500	252,010	283,490
SWC	1179	5000	2015-17	Richalnd Co. WRD	Legal Drain #5 (Lateral 27) Reconstruction	3/9/2016	531,000	330,516	200,484
SWC	1222	5000	2015-17	Sargent Co WRD	Drain No 11 Channel Improvements	10/12/2016	1,417,967	0	1,417,967
SWC	1227	5000	2011-13	Traill Co. WRD	Mergenthal Drain No. 5 Reconstruction	9/15/2014	18,502	6,277	12,225
SWC	1231	5000	2015-17	Traill Co. WRD	Carson Drain No. 10 Channel Improvements	10/12/2016	152,328	0	152,328
SWC	1236	5000	2015-17	Traill Co. WRD	Murray Drain No. 17 Channel Improvements	10/12/2016	138,450	0	138,450
SWC	1242	5000	2013-15	Traill Co. WRD	Rust Drain No. 24 Project	12/13/2013	25,152	3,002	22,150
SE	1264	5000	2013-15	Barnes Co WRD	Little Dam Repurposing Feasibility Study	6/17/2015	16,100	3,715	12,385
SWC	1270	5000	2013-15	Burleigh Co. WRD	Apple Creek Industrial Park Levee Feasibility Study	10/7/2013	65,180	0	65,180
SE	1270	5000	2015-17	City of Wilton	Wilton Pond Dredging Recreation Project	12/29/2015	35,707	0	35,707
SWC	1273	5000	2015-17	City of Oakes	James River Bank Stabilization	12/11/2015	262,500	0	262,500
SE	1287	5000	2013-15	McHenry Co. WRD	Souris River Snagging & Clearing Project	2/3/2015	15,000	4,500	10,500
SE	1289	5000	2015-17	McKenzie Co. Weed Board	Control of Noxious Weeds on Sovereign Land	4/10/2017	44,010	0	44,010
SWC	1294	5000	2013-15	Nelson Co. Park Board	Stump Lake Park Bank Stabilization Project	3/11/2015	115,436	0	115,436
SE	1296	5000	2013-15	Pembina Co. WRD	Bathgate-Hamilton & Carlisle Watershed Study	10/17/2013	45,226	38,500	6,726
SWC	1301	5000	2015-17	Richland Co. WRD	North Branch Antelope Creek NRCS Small Watershec	3/9/2016	113,400	0	113,400
SE	1303	5000	2013-15	Sargent Co WRD	Gwinner Dam Improvement Feasibility Study Program	4/17/2015	42,844	18,750	24,094
SE	1303	5000	2015-17	Sargent Co WRD	Gwinner Dam Breach Project	2/20/2017	31,125	0	31,125
SWC	1303	5000	2015-17	Sargent Co WRD	Shortfoot Creek Watershed Planning Program	3/9/2016	154,000	44,953	109,047
SWC	1311	5000	2015-17	Traill Co. WRD	Buxton Township Improvement District No. 68	3/9/2016	512,090	384,115	127,975
SWC	1314	5000	2015-17	Wells Co. WRD	Hurdsfield Legal Drain	3/29/2017	644,292	0	644,292
SE	1328	5000	2015-17	North Cass Co. WRD	Drain No. 23 Channel Improv Preliminary Engineering	9/30/2015	5,775	4,854	921
SWC	1328	5000	2015-17	North Cass Co. WRD	Drain #23 Channel Improvements	3/9/2016	137,181	55,569	81,612
SWC	1331	5000	2015-17	Richland Co WRD	Drain #14 Reconstruction	12/9/2016	315,000	0	315,000
SWC	1389	5000	2013-15	Bank of ND	BND AgPace Program	12/13/2013	180,316	9,951	170,365
SWC	1401	5000	2015-17	Pembina Co. WRD	International Boundary Roadway Dike Pembina	12/11/2015	786,032	491,504	294,528
SWC	1418	5000	2013-15	City of Bisbee	Big Coulee Dam Feasibility Study	5/29/2014	10,963	0	10,963
SWC	1418	5000	2015-17	City of Bisbee	Design & Repair of Big Coulee Dam	4/10/2017	1,090,983	1,070,678	20,305
SE	1418	5000	2015-17	City of Bisbee	Big coulee Dam EAP	5/10/2017	11,320	0	11,320
SE	1444	5000	2015-17	City of Pembina	Flood Protection System Certification	4/19/2016	75,000	73,343	1,657
SE	1453	5000	2015-17	Hettinger County WRD	Karey Dam Rehabilitation Feasibility Study	5/23/2016	13,550	6,697	6,853
SWC	1486	5000	2015-17	Griggs Co. WRD	Thompson Bridge Outlet No. 4 Project	10/6/2015	621,661	0	621,661
SWC	1520	5000	2015-17	Walsh Co. WRD	Walsh County Drain 30-1	3/29/2017	282,307	0	282,307
SWC	1520	5000	2015-17	Walsh Co. WRD	Drain 87/McLeod Drain	3/29/2017	5,238,586	0	5,238,586
SWC	1523	5000	2015-17	Ward Co. WRD	Robinwood Bank Stabilization Project	10/6/2015	256,449	38,331	218,118
SE	1625	5000	2015-17	Carlson McCain, Inc.	Ordinary High Water Mark Delineations Left Bank of M	12/2/2016	23,800	0	23,800
SWC	1638	5000	2009-11	Mutiple	Red River Basin Non-NRCS Rural/Farmstead Ring Dil	6/23/2009	177,864	0	177,864
SWC	1650	5000	2015-17	Sargent Co WRD	Drain #7 Improvement	7/6/2016	202,663	186,245	16,418
SWC	1705	5000	2011-13	Red River Joint Water Resour	Red River Joint WRD Watershed Feasibility Study - Pl	9/21/2011	60,000	40,782	19,218
SWC	1705	5000	2011-13	Red River Joint Water Resour	Red River Basin Distributed Plan Study	12/7/2012	560,000	0	560,000

STATE WATER COMMISSION
PROJECT SUMMARY
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GENERAL PROJECT OBLIGATIONS

Approved By	SWC No	Dept	Approved Biennum	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Apr-17* Balance
SE	1808	5000	2015-17	Steele Co WRD	Beaver Creek Dam Safety Inspection	5/23/2016	2,625	0	2,625
SE	1842	5000	2013-15	Southeast Cass WRD	Wild Rice River Snagging & Clearing	10/27/2015	57,000	37,334	19,666
SE	1842	5000	2015-17	Southeast Cass WRD	Wild Rice River Snagging & Clearing	12/13/2016	57,000	0	57,000
SWC	1859	5000	2015-17	ND Dept of Health	NPS Pollution Project	7/29/2015	200,000	67,003	132,997
SWC	1891	5000	2015-17	Steele Co WRD	Drain No. 8 Channel Improvement	7/6/2016	411,773	400,293	11,480
SWC	1921	5000	2007-09	Morton Co. WRD	Square Butte Dam No. 6/(Harmon Lake) Recreation F	3/23/2009	231,002	57,176	173,826
SWC	1932	5000	2015-17	Nelson Co. WRD	Michigan Spillway Rural Flood Assessment	3/9/2016	1,214,256	1,188,406	25,850
SE	1946	5000	2015-17	Walsh Co. WRD	Improvement of Walsh Co Drain #22 Preliminary Engi	4/19/2016	10,500	9,304	1,196
SWC	1951	5000	2015-17	Maple River WRD	Lynchburg Channel Improvements	7/6/2016	1,131,338	0	1,131,338
SWC	1951	5000	2015-17	Maple River WRD	Lynchburg Channel Improvements	7/6/2016	63,788	0	63,788
SWC	1968	5000	2013-15	Garrison Diversion	McClusky Canal Mile Marker 10 & 49 Irrigation Project	3/17/2014	256,321	204,707	51,614
SWC	1968	5000	2015-17	Garrison Diversion	MM 15 Irrigation Project	3/29/2017	321,781	0	321,781
SE	1974	5000	2015-17	USGS	Regulated Streamflow Frequency for the Upper Souris	12/16/2016	37,100	12,366	24,734
SE	1974	5000	2015-17	USGS	Installation of 5 Rapid Deployment Gages in the Mous	3/23/2017	23,200	0	23,200
SWC	1975	5000	2015-17	Walsh Co. WRD	Drain 31-1	10/12/2016	111,543	0	111,543
SWC	1977	5000	2011-13	Dickey-Sargent Co WRD	Jackson Township Improvement Dist. #1	5/20/2015	1,601,325	1,153,672	447,653
SE	1978	5000	2015-17	Richland-Sargent Joint WRD	RS Legal Dam #1 - Pre-Construction Engineering	10/24/2016	13,680	0	13,680
SWC	1978	5000	2015-17	Richland-Sargent Joint WRD	RS Legal Drain #1 Extension & Channel Improvement	3/29/2017	378,000	0	378,000
SWC	1990	5000	2011-13	Mercer Co. WRD	Lake Shore Estates High Flow Diverstion Project	3/7/2012	43,821	0	43,821
SWC	1991	5000	2013-15	City of Lisbon	Sheyenne Riverbank Stabilization Project	9/15/2014	163,720	115,952	47,768
SWC	2008	5000	2013-15	City of Mapleton	Recertification of Flood Control Levee System Project	3/17/2014	101,100	0	101,100
SE	2016	5000	2015-17	Pembina Co. WRD	Establishment of Pembina County Drain No. 80	4/10/2017	74,965	0	74,965
SWC	2022	5000	2011-13	Pembina Co. WRD	Drain #73 Project	6/19/2013	350,400	111,196	239,204
SWC	2043	5000	2015-17	Pembina Co. WRD	District's Drain 78 Outlet Extension Project	12/9/2016	390,041	296,678	93,363
SWC	2045	5000	2013-15	Mercer Co. WRD	LiDAR Collection Project	5/29/2014	10,425	0	10,425
SWC	2049	5000	2015-17	Grand Forks Co. WRD	Grand Forks Legal Drain No. 58	3/29/2017	1,481,850	0	1,481,850
SE	2050-50	5000	2015-17	Grand Forks Traill RWD	Eastern Expansion & TRWD Interconnect Fesibility & I	11/15/2016	75,000	0	75,000
SE	2055	5000	2015-17	Red River Joint Water Resour	Lower Red Basin Regional Detention Study	7/17/2015	45,500	0	45,500
SE	2058	5000	2015-17	City of Grafton	Grafton Debris Removal Plan	4/10/2017	8,177	0	8,177
SWC	2059	5000	2015-17	Park River Joint WRD	North Branch Park River NRCS Watershed Study	10/6/2015	81,200	0	81,200
SWC	2060	5000	2015-17	Walsh Co. WRD	Forest River Watershed Study	4/10/2017	154,012	0	154,012
SWC	2062	5000	2015-17	Traill Co. WRD	Traill Co. Drain #64	7/6/2016	116,558	7,787	108,771
SWC	2065	5000	2015-17	Cass Co. Joint WRD	Lake Bertha Flood Control Project No. 75	3/9/2016	201,350	0	201,350
SWC	2066	5000	2015-17	Southeast Cass WRD	Sheyenne-Maple Flood Control Dist #1 Mitigation Impr	3/9/2016	198,023	0	198,023
SWC	2068	5000	2015-17	Traill Co. WRD	Stavanger-Belmont Drain No. 52 Channel Impr	10/12/2016	435,015	0	435,015
SE	2068	5000	2013-15	Traill Co. WRD	Stavanger-Belmont Drain No. 52 Channel - Study	4/20/2016	18,589	0	18,589
SE	2069	5000	2015-17	Center Township	Wild Rice River Bank Stabilization	4/19/2016	43,036	42,082	954
SE	2070	5000	2015-17	Garrision Diversion Conservar	Mile Marker 42 Irrigation Project	5/20/2016	29,741	0	29,741
SE	2071	5000	2015-17	Foster County WRD	Alkali Lake High Water Feasibilitly Study	4/19/2016	5,250	420	4,830
SE	2072	5000	2015-17	Barnes Co WRD	Ten Mile Lake Flood Risk Reduction Project	6/8/2016	37,800	988	36,812
SWC	2073	5000	2015-17	Walsh Co. WRD	Oslo Area Ag Levee Feasibility Study	7/6/2016	187,000	86,464	100,536
SWC	2074	5000	2015-17	City of Wahpeton	Flood Control - Levee Certification	7/6/2016	247,500	0	247,500
SWC	2074	5000	2015-17	City of Wahpeton	Toe Drain & Encroachment Project	7/6/2016	1,125,482	0	1,125,482
SWC	2074	5000	2015-17	City of Wahpeton	Breakout Easements	7/6/2016	265,000	0	265,000
SWC	2075	5000	2015-17	Ward Co. WRD	Second Larson Coulee Detention Pond	7/6/2016	602,307	0	602,307
SE	2076	5000	2015-17	Elm River Joint WRD	Elm River Dam #1 Modification Study	7/6/2016	9,503	0	9,503
SE	2078	5000	2015-17	Southeast Cass WRD	Raymond-Mapleton Township Improv Dist No. 76	11/15/2016	20,281	0	20,281
SE	2079	5000	2015-17	City of Williston	West Williston Flood Control	10/24/2016	39,900	0	39,900
SWC	2080	5000	2015-17	Walsh Co. WRD	Sam Berg Coulee Drain	10/12/2016	401,005	0	401,005
SWC	2081	5000	2015-17	Walsh Co. WRD	Drain #70	10/12/2016	898,866	0	898,866
SWC	2083	5000	2015-17	Pembina Co. WRD	Herzog Dam Gate & Catwalk Retrofit - Construction	10/12/2016	117,000	0	117,000
SE	2085	5000	2015-17	Adams Co WRD	Orange Dam Rehabilitation Feasibility Study	10/13/2016	10,770	0	10,770
SWC	2088	5000	2015-17	Pembina Co. WRD	Drain No. 79	12/9/2016	875,428	0	875,428
SE	2089	5000	2015-17	Maple River WRD	Tower Township Improvement District No. 77 Study	12/19/2016	28,175	0	28,175
SE	2090	5000	2015-17	International Water Institute	River Watch Program	1/12/2017	24,150	0	24,150
SE	2094	5000	2015-17	McLean Co WRD	Lower Buffalo Creek Flood Management Feasibility	2/16/2017	7,539	0	7,539
SE	2095	5000	2015-17	Nelson Co WRD	Sheyenne River Snagging & Clearing	4/10/2017	19,700	0	19,700
SWC	2096	5000	2015-17	Southeast Cass WRD	Sheyenne-Maple Flood Control Dist #2 Improvements	3/29/2017	1,035,358	0	1,035,358
SE	2093/1427	5000	2015-17	Bottineau Co. WRD	Moen Legal Drain	9/6/2016	63,458	44,916	18,542
SE	1396-01	5000	2013-15	Trout, Raley, Montano, Witwe	Missouri River Recovery Program	11/17/2015	75,000	27,840	47,160
SE	1878-02	5000	2015-17	Maple-Steele Joint WRD	Upper Maple River Dam EAP	5/20/2016	12,800	0	12,800
SWC	849-01	5000	2015-17	Pembina Co. WRD	Tongue River NRCS Watershed Plan	3/9/2016	104,703	0	104,703
SWC	AOC/ASS	5000	2015-17	Assiniboine River Basin	Assiniboine River Basin Initiative Funding	7/29/2015	100,000	75,000	25,000
SWC	AOC/IRA	5000	2015-17	ND Irrigation Association (NDI	ND Irrigation Association	10/6/2015	100,000	75,000	25,000
SWC	AOC/RRBC	5000	2015-17	Red River Basin Commission	Red River Basin Commission Contractor	5/20/2015	200,000	150,000	50,000
SWC	AOC/WEF	5000	2015-17	ND Water Education Foundati	ND Water Magazine	5/20/2015	36,000	27,000	9,000
SE	AOC/WUA	5000	2011-13	ND Water Users Association	Dave Koland Term as WUA President	3/23/2015	9,672	5,772	3,899
SWC	PS/WRD/ELM	5000	2013-15	Elm River Joint WRD	Dam #3 Safety Improvements Project	9/15/2014	7,297	1,625	5,672
SWC	PS/WRD/MRJ	5000	2015-17	Missouri River Joint WRB	Missouri River Joint Water Board, (MRJWB) Start up	5/20/2015	20,000	6,347	13,653
SWC	PS/WRD/MRJ	5000	2015-17	Missouri River Joint WRB	Missouri River Joint Water Board (MRRIC) T. FLECK	5/20/2015	45,000	20,212	24,788
SWC	PS/WRD/UPP	5000	2015-17	Upper Sheyenne River Joint V	Upper Sheyenne River WRB Administration (USRJWF	5/20/2015	12,000	3,398	8,602
SE	PS/WRD/LOW	5000	2015-17	Lower Heart WRD	Lower Heart Flood Contral	5/10/2017	21,140	0	21,140
					TOTAL		38,273,178	8,585,486	29,687,692

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COMPLETED GENERAL PROJECTS

Approved By	SWC No	Dept	Approved Biennum	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Apr-17* Balance
SWC	228	5000	2013-15	U.S. Geological Survey	(USGS) Operation & Maint of Gaging Station on the Missouri R	12/8/2014	8,970	8,970	0
SWC	240	5000	2011-13	Eddy County WRD	Warwick Dam Repair Project	12/7/2012	110,150	110,150	0
SE	274	5000	2013-15	City of Neche	FEMA Levee Certification Feasibility Study	10/17/2014	37,500	37,500	0
SWC	281	5000	2009-11	Three Affiliated Tribes	Three Affiliated Tribes/Fort Berthold Irrigation Study	10/26/2010	37,500	0	37,500
SWC	346	5000	2011-13	Williams County WRD	Epping Dam Evaluation Project	2/27/2013	66,200	60,840	5,360
SE	346	5000	2013-15	Williams County WRD	Design Engineering for Epping Dam Safety Repair	7/6/2016	24,658	24,658	0
SE	391	5000	2011-13	Sargent Co WRD	Sargent Co WRD, Silver Lake Dam Emergency Repairs	10/12/2011	2,800	0	2,800
SE	568	5000	2013-15	Barnes Co WRD	Sheyenee River Snagging & Clearing Project	4/17/2015	49,500	49,500	0
SWC	645	5000	2009-11	City of Fargo	Hickson Dam Recreation Retrofit Project	10/26/2010	44,280	44,280	0
SWC	646	5000	2009-11	City of Fargo	Christine Dam Recreation Retrofit Project	10/26/2010	184,950	139,034	45,916
SWC	829	5000	2011-13	Rush River WRD	Rush River WRD Berlin's Township Improvement District No. 7	10/19/2011	101,317	0	101,317
SWC	841	5000	2015-17	Maple River WRD	Swan Buffalo Detention Dam #12(Absaraka Dam)	11/15/2016	127,164	121,561	5,603
SWC	841	5000	2015-17	Maple River WRD	Swan Buffalo Detention Dam #5(Garsteig Dam)	11/17/2016	156,426	154,672	1,754
SE	849	5000	2015-17	Pembina Co. WRD	Renwick Dam Gate Repair	9/4/2015	53,700	50,066	3,634
SWC	980	5000	2011-13	Maple River WRD	Maple River Watershed Flood Water Retention Study/ Maple R	2/19/2015	3,687	3,687	0
SE	1069	5000	2015-17	North Cass & Rush River	Drain #13 Channel Improvements Project	9/29/2015	46,150	12,293	33,857
SWC	1082	5000	2013-15	Rush River WRD	Cass Co. Drain No. 30 Channel Improvement Project	3/17/2014	5,976	5,970	6
SWC	1135	5000	2011-13	Pembina Co. WRD	Drain #4 Reconstruction Project	6/19/2013	2,673	0	2,673
SWC	1161	5000	2009-11	Pembina Co. WRD	Drain 55 Improvement Reconstruction	3/28/2011	13,846	0	13,846
SE	1179	5000	2013-15	Richland Co. WRD	Drain #5 (27) Reconstruction Project	3/30/2015	13,543	13,543	0
SWC	1183	5000	2013-15	Richland Co. WRD	Drain No. 15 Reconstruction Project	9/15/2014	60,300	49,055	11,245
SWC	1217	5000	2013-15	Tri-County WRD	Tri-County Drain Reconstruction Project	3/11/2015	911,881	590,679	321,202
SE	1219	5000	2013-15	Sargent Co WRD	Drain No. 8 Channel Improvement Preliminary Engineering Pro	5/7/2015	6,650	6,650	0
SWC	1219	5000	2011-13	Sargent Co WRD	City of Forman Floodwater Outlet	12/13/2016	47,012	47,012	0
SWC	1224	5000	2013-15	Traill Co. WRD	Palace Drain Improvement District No. 80	5/20/2015	149,828	130,947	18,881
SE	1289	5000	2011-13	McKenzie Co. Weed Con	Control of Noxious Weeds on Sovereign Lands	9/30/2015	12,514	12,514	0
SE	1290	5000	2015-17	McLean Co. WRD	Painted Woods Lake Flood Mitigation Study	4/1/2016	53,200	53,200	0
SE	1301	5000	2009-11	City of Lidgerwood	City of Lidgerwood Engineering & Feasibility Study for Flood Cc	2/4/2011	15,850	0	15,850
SE	1301	5000	2011-13	City of Wahpeton	City of Wahpeton Water Reuse Feasibility Study/Richland Co	9/8/2011	2,500	0	2,500
SE	1303	5000	2013-15	Sargent Co WRD	Upper Wild Rice Watershed Study	6/24/2015	73,500	73,485	15
SE	1311	5000	2013-15	Traill Co. WRD	Buxton Township Improvement District No. 68	6/17/2015	15,745	15,745	0
SE	1312	5000	2011-13	Walsh Co. WRD	Skyrud Dam 2011 EAP	12/15/2011	10,000	8,073	1,927
SE	1312	5000	2011-13	Walsh Co. WRD	Union Dam 2011 EAP	12/15/2011	10,000	8,350	1,650
SWC	1314	5000	2013-15	Wells Co. WRD	Oak Creek Drain Lateral E Reconstruction Project	9/15/2014	73,057	73,057	0
SE	1314	5000	2015-17	Wells Co. WRD	Oak Creek Lateral E Reconstruction	12/29/2015	20,173	20,173	0
SE	1314	5000	2013-15	Wells Co. WRD	Hurdsfield Area Drain Preliminary Engineering Project	6/11/2015	35,000	35,000	0
SWC	1396	5000	2011-13	U.S. Geological Survey	(USGS) Missouri River Geomorphic Assessment	3/7/2012	10,000	10,000	0
SE	1403	5000	2015-17	ND Water Resources Re:	(NDWRRI) Student Fellowship Program	12/23/2015	18,850	18,850	0
SE	1403	5000	2015-17	ND Water Resources Re:	(NDWRRI) Student Fellowship Program	1/18/2017	18,850	18,850	0
SWC	1438	5000	2011-13	Cavalier County WRD	Mulberry Creek Phase IV Reconstruction Project	6/19/2013	102,019	2,250	99,769
SWC	1444	5000	2013-15	City of Pembina	2014 Flood Protection System Modification Project	5/29/2014	61,331	61,331	0
SE	1520	5000	2015-17	Walsh Co. WRD	Walsh Co Drain #30-1	8/29/2016	14,000	14,000	0
SWC	1523	5000	2015-17	Ward Co	Flood Control County Road 18	5/29/2015	325,208	325,208	0
SWC	1554	5000	2013-15	McLean Co. WRD	City of Underwood Floodwater Outlet Project	12/13/2013	1,483,268	1,483,268	0
SWC	1577	5000	2013-15	City of Killdeer & Dunn Cc	Floodplain Mapping Project	5/29/2014	55,000	55,000	0
SE	1607	5000	2011-13	Ward Co. WRD	Flood Inundation Mapping of Areas Along Souris & Des Lacs R	6/15/2011	13,011	0	13,011
SWC	1613	5000	2013-15	North Cass Co. WRD	Cass County Drain No. 55 Channel Improvements Project	9/15/2014	99,923	48,703	51,220
SWC	1625	5000	2013-15	Houston Engineering	(OHWM) Ordinary High Water Mark Delineations	8/20/2014	4,560	0	4,560
SE	1625	5000	2015-17	Ross Engineering, LLC	Gather infor regarding pipeline waterway crossings	2/9/2016	25,000	8,745	16,255
SE	1625	5000	2015-17	HDR Engineering, Inc	Dakota Access PipeLine Missouri River crossing sour analysis	2/9/2016	25,000	21,315	3,685
SB2020	1625	5000	2015-17	ND Parks & Recreation	Sovereign Lands Recreation Use Grant	1/10/2017	1,000,000	1,000,000	0
SE	1640	5000	2013-15	U.S. Geological Survey	(USGS) Maintenance of gaging station on Missouri River below	9/25/2013	8,710	0	8,710
SE	1650	5000	2015-17	Sargent Co WRD	Drain #7 Channel Improvements Study	1/17/2016	6,214	6,214	0
SE	1667	5000	2015-17	Traill Co. WRD	Goose River Snagging & Clearing	12/18/2015	47,500	47,500	0
SE	1667	5000	2015-17	Traill Co. WRD	Goose River Snagging & Clearing	9/2/2016	47,500	47,501	(1)
SE	1701	5000	2013-15	US Army Corps of Engine	Red River of the North Unsteady Flow Model	11/25/2015	17,825	17,825	0
SWC	1758	5000	2013-15	U.S. Geological Survey	(USGS) Stochastic Model for the Mouse River Basin	12/13/2013	40,000	40,000	0
SWC	1792	5000	2009-11	Southeast Cass WRD	SE Cass Wild Rice River Dam Study Phase II	1/29/2015	32,252	32,252	0
SE	1814	5000	2013-15	Richland Co. WRD	Wild Rice River Snagging & Clearing - Bridge #121-2	5/28/2015	16,000	16,000	0
SE	1815	5000	2013-15	Ransom Co. WRD	Sheyenne River Snagging & Clearing - Fort Ransom Reach	6/11/2015	6,350	6,350	0
SE	1842	5000	2013-15	Southeast Cass WRD	Wild Rice River Snagging & Clearing - Bridge Location Sites	2/3/2015	11,063	0	11,063
SE	1842	5000	2015-17	Southeast Cass WRD	Wild Rice River Snagging & Clearing	7/6/2016	24,948	24,948	0
SE	1891	5000	2015-17	Steele Co WRD	Drain No. 8 Channel Improvement Preliminary Engineering Pro	9/29/2015	17,500	17,500	0
SE	1934	5000	2015-17	Traill Co. WRD	Elm River Snagging & Clearing	9/2/2016	47,500	47,500	0
SWC	1960	5000	2009-11	Ward Co. WRD	Puppy Dog Coulee Flood Control Diversion Ditch Construction	8/18/2009	796,976	0	796,976
HB 2305	1963	5000	2009-11	Emmons County WRD	Beaver Bay Embankment Feasibilitly Study	8/10/2009	18,078	0	18,078
SE	1967	5000	2009-11	Grand Forks Co. WRD	Grand Forks County Legal Drain No. 55 2010 Contruction	11/30/2010	9,652	9,652	0
SWC	1970	5000	2009-11	Walsh Co. WRD	Walsh Co. Construction of Legal Assessment Drain # 72	3/28/2011	39,115	39,115	0
SE	1974	5000	2015-17	USGS	USGS Web-Based Mouse River Information Page	1/19/2016	24,700	24,700	0
SWC	1975	5000	2011-13	Walsh Co. WRD	Walsh Co. Drain No. 31 Reconstruction Project	9/21/2011	37,742	37,742	0
SWC	1978	5000	2011-13	Richland & Sargent Joint	Richland & Sargent WRD RS Legal Drain No. 1 Extension & Cl	7/23/2015	245,250	168,791	76,459
SWC	1983	5000	2011-13	City of Harwood	City of Harwood Engineering Feasibility Study	12/9/2011	62,500	0	62,500
SWC	1989	5000	2011-13	Barnes Co WRD	Hobart Lake Outlet Project	3/7/2012	266,100	0	266,100
SE	1991	5000	2011-13	City of Lisbon	Sheyenne River Snagging & Clearing Project	2/12/2013	5,000	5,000	0
SWC	1992	5000	2011-13	Burleigh Co. WRD	Burnt Creek Flood Restoration Project	7/29/2015	179,890	176,524	3,366
SE	1998	5000	2011-13	Grand Forks Co. WRD	Upper Turtle River Dam #1 2012 EAP	6/28/2012	10,000	9,365	635
SE	2002	5000	2011-13	Grand Forks Co. WRD	Trutle River Dam #4 2012 EAP	6/29/2012	10,000	8,656	1,344
SWC	2004	5000	2013-15	Grand Forks Co. WRD	Drain No. 57 Project	10/7/2013	413,576	413,576	0
SE	2005	5000	2011-13	Grand Forks Co. WRD	Turtle River Dam #8 2012 EAP	6/29/2012	10,000	9,069	931
SWC	2007	5000	2011-13	Maple River WRD	Pontiac Township Improvement District No. 73 Project	5/11/2015	747,093	594,183	152,910
SWC	2013	5000	2011-13	Richland-Cass Joint WRI	Wild Rice River Watershed Retention Plan	6/8/2015	45,905	45,905	0
SWC	2019	5000	2011-13	Valley City	Sheyenee River Snagging & Clearing Project	12/7/2012	75,000	0	75,000

STATE WATER COMMISSION
PROJECT SUMMARY
2015-2017 Biennium
Resources Trust Fund

COMPLETED GENERAL PROJECTS

Approved By	SWC No	Dept	Approved Biennum	Sponsor	Project	Initial Approved Date	Total Approved	Total Payments	*Apr-17* Balance
SWC	2040	5000	2013-15	Walsh Co. WRD	Drain #74 Project	10/7/2013	211,600	211,600	0
SWC	2042	5000	2013-15	Bottineau Co. WRD	Haas Coulee Drain Project	9/15/2014	500,000	500,000	0
SE	2045	5000	2013-15	Stark County	Stark County LiDAR Collection Project (FEMA)	7/17/2015	33,584	33,584	0
SWC	2045	5000	2013-15	McKenzie Co. Commissic	LiDAR Collection Project	9/15/2014	262,308	262,308	0
SWC	2046	5000	2013-15	Walsch Co. WRD	North Branch Park River Comprehensive Flood Damage Redu	12/13/2013	134,400	108,772	25,628
SWC	2047	5000	2013-15	LaMoure County	LaMoure Co Memorial Park Streambank Restoration	8/3/2016	91,042	64,240	26,802
SWC	2048	5000	2013-15	City of Marion	Marion Flood Mitigation & Lagoon Drainage Project	5/29/2014	116,659	116,599	60
SWC	2063	5000	2015-17	Maple River WRD	Swan Buffalo Detention Dam #8(Embden Dam)	11/17/2016	123,087	120,803	2,284
SWC	1878-02	5000	2011-13	Maple-Steele Joint WRD	Upper Maple River Dam Construction Phase	12/13/2013	4,702,936	4,415,496	287,440
SB2020	1928-04	5000	2015-17	NDSU	Fargo Moorhead Diversion Agricultural Impact (Study)	1/20/2016	80,000	79,716	284
SB2009	1986-03	5000	2015-17	USDA-APHIS,ND Dept A	USDA Wildlife	9/9/2015	250,000	250,000	0
SWC	2003-02	5000	2011-13	Southeast Cass WRD	Re-Certification of the West Fargo Diversion Levee System	7/23/2015	52,564	32,813	19,751
SWC	2009-02	5000	2011-13	Southeast Cass WRD	Recertification of the Horace to West Fargo Diversion Levee S	9/17/2012	25,504	25,504	0
SE	AOC/WEF/TO	5000	2015-17	ND Water Education Fou	2017 Summer Water Tours Sponsorship	4/5/2017	2,500	2,500	0
SE	ASNDS	5000	2015-17	NDSU	Oaks Irrigation Research Site - New Linear Irrigation System	11/18/2015	25,636	25,636	0
SE	CON/CAR	5000	2015-17	Garrison Diversion	Will and Carlson Consulting Services	1/12/2016	17,500	10,795	6,705
SWC	CON/WIL/CAF	5000	2013-15	Garrison Diversion Conse	Will and Carlson Consulting Contract	12/13/2013	26,451	1,828	24,623
SE	NDAWN	5000	2015-17	NDSU	NDAWN CENTER	2/11/2016	1,500	1,500	0
SE	NDAWN	5000	2015-17	NDSU	NDAWN CENTER	1/31/2017	1,500	1,500	0
SWC	PS/WRD/DEV	5000	2015-17	Devils Lake Joint WRB	DL Manager	5/20/2015	60,000	60,000	0
SWC	PS/WRD/MRJ	5000	2013-15	Missouri River Joint WRB	Missouri River Coordinator	10/7/2013	37,094	14,327	22,767
SE	PSIRRBUF	5000	2015-17	Buford Trenton Irrigation I	Upgrade to 3-Phase Power	4/19/2016	32,770	32,770	0
SE	PSWRDBUR	5000	2015-17	Burleigh Co. WRD	Pebble Creek Golf Course - Hay Creek Bank Stabilization	10/15/2015	22,782	22,782	0
SE	PSWRDCAS	5000	2015-17	Cass Co. Joint WRD	Red River Watershed Comprehensive Detention Plan Updates	11/19/2015	34,025	34,025	0
					TOTAL		16,009,601	13,303,150	2,706,451

Agenda A-3)

North Dakota State Water Commission

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MEMORANDUM

TO: Governor Doug Burgum
North Dakota Water Commission Members
FROM: Garland Erbele P.E., Chief Engineer-Secretary
SUBJECT: 2015-2017 Biennium Contract Fund Carryover
DATE: June 1, 2017

During the 2015-2017 biennium, the programs and projects administered by the Commission's Water Resource Program Administrator have been thoroughly scrutinized for those with remaining obligated funds that are completed or not undertaken. Those projects have been identified and the obligated funds returned to the appropriate account and the program/project removed or transferred to a non-active/completed listing.

Commonly water projects require a couple or more years to complete due to regulatory issues, funding needs, contracting, bidding and construction delays, project inspections, weather, auditing requirements, etc. As projects are completed they are moved from the active listing to the non-active/completed listing and remaining approved funds de-obligated and returned to the appropriate account.

At this time, all of the programs and projects listed on the "2015-2017 Biennium Projects/Grant/Contract Fund" with obligated funds are to be pursued in the foreseeable future, with the exception of the following projects: A $3,000,000 loan approval to Valley City for their permanent flood protection project. Valley City received funding through Valley City State University that eliminated the need for this loan. We will also release the unexpended balances for the Devils Lake outlet construction projects, but will carry over the unexpended funding for operation of the outlets.

I recommend that all of the 2015-2017 program and general project unexpended obligation amounts (which includes all previous biennium carryovers) be carried over to the 2017-2019 biennium, except for the identified projects. This approval is subject to the availability of funds.

Agenda E 1

State of
North Dakota
Office of the Governor

Doug Burgum
Governor

May 2, 2017

The Honorable Larry Bellew
Speaker of the House
North Dakota House of Representatives
State Capitol
Bismarck, ND 58505

Dear Speaker Bellew:

Pursuant to Article V, Section 9 of the North Dakota Constitution, I have vetoed the last sentence of paragraph 2, Section 5 and all of Section 27 of House Bill 1020, the appropriations bill for the State Water Commission.

The portion of Section 5 that reads: "subject to budget section approval and upon notification to the legislative management's water topics overview committee." is vetoed. This sentence requires the Commission to seek budget section approval before transferring funding between the projects identified under paragraph 1, Section 5.

In *Kelsch v. Jaeger*, the North Dakota Supreme Court concluded the legislature may not delegate legislative powers to a subset of its members. 641 N.W.2d 100 (ND 2002). If enacted, the vetoed portion of Section 5 will interfere with the duties and responsibilities of the State Water Commission as defined under North Dakota law. NDCC § 61-02-04.

Section 27 of House Bill 1020 requires the Commission budget for the 2019-2021 biennium comply with NDCC §§ 54-44.1-16 and include line items for salaries and wages, operating expenses, capital assets, project carryover, new projects "and any additional line items as determined necessary by the commission or office of management and budget." NDCC § 54-44.1-04.

While well intentioned, these requirements will impair the duties and responsibilities of the Commission. Many water projects fit into multiple line item categories. Certain projects proceed slowly, delayed by legal, environmental, cost share and other factors driven by outside parties. The simpler budgeting format previously adopted and approved by the legislature gives the Commission a flexible and efficient model from which to work and should be retained.

As Chair of the State Water Commission, I will ensure our governing board prioritizes public transparency of project expenditures through regular and detailed reporting.

Sincerely,

Doug Burgum
Governor

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Sixty-fifth Legislative Assembly of North Dakota
In Regular Session Commencing Tuesday, January 3, 2017

HOUSE BILL NO. 1020
(Appropriations Committee)

AN ACT to provide an appropriation for defraying the expenses of the state water commission; to provide an appropriation to the industrial commission; to amend and reenact section 57-51.1-07, subsection 10 of section 61-02-02, section 61-02-08, subsection 1 of section 61-02-78, section 61-02-79, the new section to chapter 61-03, as created by section 12 of House Bill No. 1374, as approved by the sixty-fifth legislative assembly, and sections 61-29-06, 61-40-05, and 61-40-11of the North Dakota Century Code, relating to the oil extraction tax development fund, the definition of water conveyance project, the state water commission chairman and vice chairman, the infrastructure revolving loan fund, a Bank of North Dakota line of credit, economic analyses for certain water projects, management of the Little Missouri scenic river, the authority of the western area water supply authority, and water rates of the western area water supply authority; to provide for budget section approval; to provide for a state engineer study; to provide for an industrial commission study; to provide for a legislative management study; to provide for reports; to provide a statement of legislative intent; to designate funding; to provide for a transfer; to provide exemptions; to provide a contingent effective date; to provide an effective date; to provide an expiration date; and to declare an emergency.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

SECTION 1. APPROPRIATION. The funds provided in this section, or so much of the funds as may be necessary, are appropriated from special funds derived from federal funds and other income, to the state water commission for the purpose of defraying the expenses of the state water commission, for the biennium beginning July 1, 2017, and ending June 30, 2019, as follows:

	Base Level	Adjustments or Enhancements	Appropriation
Administrative and support services	$5,535,618	$97,568	$5,633,186
Water and atmospheric resources	863,400,218	(146,859,929)	716,540,289
Total all funds	$868,935,836	($146,762,361)	$722,173,475
Full-time equivalent positions	97.00	(4.00)	93.00

SECTION 2. HEALTH INSURANCE INCREASE. The appropriation in section 1 of this Act includes the sum of $257,498 of other funds, for increases in employee health insurance premiums from $1,130 to $1,241 per month.

SECTION 3. ADDITIONAL INCOME - APPROPRIATION - BUDGET SECTION APPROVAL. In addition to the amounts appropriated in section 1 of this Act, any additional amounts in the resources trust fund and water development trust fund which become available are appropriated, subject to budget section approval, to the state water commission for the purpose of defraying the expenses of that agency, for the biennium beginning July 1, 2017, and ending June 30, 2019.

SECTION 4. GRANTS - WATER-RELATED PROJECTS - CARRYOVER AUTHORITY. Section 54-44.1-11 does not apply to funding for grants or water-related projects included in the water and atmospheric resources line item in section 1 of this Act. However, this exclusion is only in effect for two years after June 30, 2019. Any unexpended funds appropriated from the resources trust fund after that period has expired must be transferred to the resources trust fund and any unexpended funds appropriated from the water development trust fund after that period has expired must be transferred to the water development trust fund.

SECTION 5. STATE WATER COMMISSION PROJECT FUNDING DESIGNATIONS - TRANSFERS - ~~BUDGET SECTION APPROVAL~~.

1. Of the funds appropriated in the water and atmospheric resources line item in section 1 of this Act from funds available in the resources trust fund and water development trust fund, $298,875,000 is designated as follows:

   a. $120,125,000 for water supply;

   b. $27,000,000 for rural water supply;

   c. $136,000,000 for flood control; and

   d. $15,750,000 for general water.

2. The funding designated in this section is for the specific purposes identified; however, the state water commission may transfer funding among these items, ~~subject to budget section approval and upon notification to the legislative management's water topics overview committee.~~

SECTION 6. LEGISLATIVE INTENT - MOUSE RIVER FLOOD CONTROL PROJECT FUNDING. Except for funding provided during bienniums prior to the 2017-19 biennium, it is the intent of the sixty-fifth legislative assembly that the state provide no more than $193,000,000 of state funding for Mouse River flood control projects within the city limits of Minot. It is the intent of the sixty-fifth legislative assembly that the $193,000,000 be made available during the 2017-19, 2019-21, 2021-23, and 2023-25 bienniums.

SECTION 7. LEGISLATIVE INTENT - RED RIVER VALLEY WATER SUPPLY PROJECT - BUDGET SECTION APPROVAL. It is the intent of the sixty-fifth legislative assembly that the state water commission provide, in the form of a grant, up to $30,000,000, of which $17,000,000 is for the completion of the planning and permitting process and $13,000,000 is to initiate construction of phase one prioritized project features identified in accordance with subsection 2 of section 8 of this Act, to the Garrison diversion conservancy district for the Red River valley water supply project, for the biennium beginning July 1, 2017, and ending June 30, 2019. The Garrison diversion conservancy district must receive budget section approval prior to changing any funding between designations identified in this section.

SECTION 8. RED RIVER VALLEY WATER SUPPLY PROJECT - REPORT TO LEGISLATIVE MANAGEMENT - BUDGET SECTION APPROVAL. Any funding received by the Garrison diversion conservancy district from the state water commission for the Red River valley water supply project during the biennium beginning July 1, 2017, and ending June 30, 2019, is subject to the following requirements:

1. Any funding received for the completion of the planning and permitting process of the Red River valley water supply project must result in the following accomplishments:

   a. The completed Red River valley water supply plan document that will be the basis and justification for project construction and must include alternative selection, water supply needs, projected project costs, easement acquisitions, environmental regulation compliance to include the Boundary Waters Treaty of 1909, and an implementation schedule;

   b. Acquisition of all state and federal permits required for the construction of any project features intended to be constructed with funding provided during the 2017-19 biennium;

   c. A signed bureau of reclamation water service contract agreeing to a minimum of one hundred sixty-five cubic feet per second over a minimum of forty years or equivalent to ensure an adequate water source for the project's needs;

   d. Prioritized project features for phase one construction; and

e. A recommendation for funding options for all phases of the Red River valley water supply project.

2. Any funding received to initiate construction of phase one prioritized project features identified in subsection 1 may be spent and construction of phase one may begin only after the budget section receives and approves certification from the state water commission and the state engineer that all items listed in subsection 1 have been accomplished.

3. Quarterly progress reports on the Red River valley water supply project from the Garrison diversion conservancy district to the water topics overview committee of the legislative management, during the 2017-18 interim.

SECTION 9. WESTERN AREA WATER SUPPLY AUTHORITY - BANK OF NORTH DAKOTA LOAN - REPORTS. Notwithstanding section 5 of chapter 500 of the 2011 Session Laws, the Bank of North Dakota shall consolidate the $40,000,000 loan to the western area water supply authority authorized in section 5 of chapter 20 of the 2013 Session Laws, the $50,000,000 loan to the western area water supply authority authorized in section 2 of chapter 500 of the 2011 Session Laws, and the $25,000,000 loan from the general fund to the western area water supply authority authorized in section 3 of chapter 500 of the 2011 Session Laws. The terms and conditions of the consolidation loan must be negotiated by the western area water supply authority and the Bank of North Dakota. The western area water supply authority is not obligated to repay principal on loans from the resources trust fund for the period beginning July 1, 2017, and ending June 30, 2018. The interest rate on the $10,000,000 loan to the western area water supply authority authorized in section 4 of chapter 500 of the 2011 Session Laws must be 2.5 percent on any outstanding balance remaining after the effective date of this Act. The Bank of North Dakota shall report the terms of the consolidation loan upon its completion to the legislative management's water topics overview committee during the 2017-18 interim. The western area water supply authority shall provide its monthly financial statements and industrial sales to the legislative council for the legislative management's water topics overview committee's review during the 2017-18 interim.

SECTION 10. WESTERN AREA WATER SUPPLY AUTHORITY DEBT SERVICE SHORTFALL - BUDGET SECTION APPROVAL. If the western area water supply authority defaults on its payment of the principal or interest on the consolidation loan provided for in section 9 of this Act or the revenue bonds or other financing provided for in section 12 of this Act, the Bank of North Dakota shall notify the legislative council, and the state water commission shall provide a payment, subject to budget section approval, to the Bank of North Dakota in an amount of the default as certified to the budget section by the Bank of North Dakota.

SECTION 11. APPROPRIATION - INDUSTRIAL COMMISSION STUDY - WESTERN AREA WATER SUPPLY AUTHORITY - REPORT TO LEGISLATIVE MANAGEMENT. There is appropriated out of any moneys in the resources trust fund, in the state treasury, the sum of $150,000, or so much of the sum as may be necessary, to the industrial commission for the purpose of conducting an independent study of the feasibility and desirability of the sale or lease of the industrial water supply assets of the western area water supply authority, for the period beginning with the effective date of this Act, and ending June 30, 2019. The study must provide information regarding the financial impact to the western area water supply authority, its members and customers, the financial viability of the authority, and options available to the authority for debt servicing. The industrial commission may form a nonvoting advisory committee chaired by the state engineer to provide input regarding the scope of the study and to receive reports on the status of the study. The industrial commission shall report to the legislative management's interim water topics overview committee on the results of the study by June 1, 2018.

SECTION 12. ACTIONS RESULTING FROM THE WESTERN AREA WATER SUPPLY AUTHORITY STUDY.

1. If the industrial commission determines, based on the study directed in section 11 of this Act, that it is feasible and desirable to lease or sell the industrial water supply assets of the western

area water supply authority, the industrial commission shall develop a timeline to complete the lease or the sale of the industrial water assets of the western area water supply authority and report to the legislative management's interim water topics overview committee.

2. If the industrial commission determines, based on the study directed in section 11 of this Act, that it is not feasible and desirable to lease or sell the industrial water supply assets of the western area water supply authority, notwithstanding section 5 of chapter 500 of the 2011 Session Laws, the western area water supply authority shall, with the assistance of the industrial commission and the Bank of North Dakota, repay its obligations to the Bank of North Dakota through the issuance of revenue bonds or other financing options acceptable to the industrial commission and Bank of North Dakota.

SECTION 13. STATE ENGINEER - FLOOD HAZARD RISK MANAGEMENT STUDY - ADDITIONAL INCOME - APPROPRIATION. The water and atmospheric resources line item in section 1 of this Act includes $30,000 of which $15,000 is from the resources trust fund and $15,000 of other funds received from Ward County, for the purpose of conducting a flood hazard risk management framework study and demonstration in section 14 of this Act, for the biennium beginning July 1, 2017, and ending June 30, 2019. The state engineer may seek funding from federal, local, and private sector co-funding partnerships. Any fees collected from data users and partners and any other funds from public or private sources, including federal grants and county revenue contributions, are appropriated to the state engineer for the study and for expanding the project to additional counties for the biennium beginning July 1, 2017, and ending June 30, 2019.

SECTION 14. LEGISLATIVE MANAGEMENT STUDY - FLOOD HAZARD RISK MANAGEMENT. During the 2017-18 interim, the legislative management shall study issues related to the state's development of a statewide flood hazard risk management framework by granting authority to the state engineer to perform a study and proof of concept demonstration to implement statewide flood risk management capabilities for assessing, managing, and reducing property-specific flood risk.

1. In performing the study and proof of concept demonstration, the state engineer may leverage, coordinate, and partner with the North Carolina floodplain mapping program and with Ward County to conduct the study and proof of concept demonstration. The state engineer shall acquire and leverage data necessary to support the study and proof of concept demonstration including:

   a. Footprints and elevations from current and future light detection and ranging data collections that meet federal emergency management agency risk mapping, assessment, and planning standards;

   b. First floor elevations and elevation certificates from local planning and zoning offices or light detection and ranging data;

   c. Parcel, address, and imagery data necessary for individual property flood hazard identification, assessment, and reduction; and

   d. Any other data the state engineer deems necessary to meet the objectives in creating the database.

2. To complete the pilot project, the state engineer shall:

   a. Construct and maintain flood hazard and risk data in a spatial, relational database;

   b. Disseminate flood hazard and risk data through a digital display environment prompted through dynamic querying;

   c. Coordinate, incentivize, and partner with a least one county to obtain the necessary parcel data and other data needed for this study and serve as the repository for the property flood risk dataset;

d. Establish a technical committee consisting of federal, state, local, and private sector stakeholders and providers to the greatest extent possible to allow data sharing, coordination, synergy, and partnering;

e. Work with the North Carolina floodplain mapping program to incorporate the property risk dataset into the multistate flood risk information system maintained by North Carolina, augment the dataset with federal emergency management agency digital flood insurance data, and assess any data or other gaps preventing this state's full use of the system;

f. Make the data publicly available on the state water commission's website in an easily accessible and useable format;

g. Provide technical assistance to data users, including reports and analysis as needed; and

h. Work with the federal emergency management agency and the study county to enable the communities and property owners to use the elevation, light detection and ranging, and other data provided on the website to submit letters of map amendment or revision to the federal emergency management agency.

3. The state engineer shall report to the legislative management as requested by the legislative management. At the conclusion of the study, the state engineer shall provide the following information to the legislative management:

a. A description of the engineer's current cooperative technical flood mapping partnership with the federal emergency management agency and any additional authority, staffing, and funding required to create a fully independent and self-sustaining state flood mapping program in lieu of the federal emergency management agency program, including the processing of letters of map change;

b. A detailed estimate of overall program costs and flood risk reductions of a self-sustaining state flood mapping program; and

c. A county assessment of the private, county, state, and federal data and resources that are currently available as compared to the resources that would be required to fully use North Carolina's flood risk information system for flood risk management, including recommendations for improvement or the statewide expansion of the project established under this study and suggested funding mechanisms and alternatives for data dissemination, which may include a one-state online repository or the provision of data by local planning and zoning offices.

SECTION 15. AMENDMENT. Section 57-51.1-07 of the North Dakota Century Code is amended and reenacted as follows:

57-51.1-07. Allocation of moneys in oil extraction tax development fund.

Moneys deposited in the oil extraction tax development fund must be transferred monthly by the state treasurer as follows:

1. Twenty percent must be allocated and credited to the sinking fund established for payment of the state of North Dakota water development bonds, southwest pipeline series, and any moneys in excess of the sum necessary to maintain the accounts within the sinking fund and for the payment of principal and interest on the bonds must be credited to a special trust fund, to be known as the resources trust fund. The resources trust fund must be established in the state treasury and the funds therein must be deposited and invested as are other state funds to earn the maximum amount permitted by law which income must be deposited in the resources trust fund. ~~Five~~Three percent of the amount credited to the resources trust fund must be transferred no less than quarterly into the renewable energy development fund, not to

exceed three million dollars per biennium. One-half of one percent of the amount credited to the resources trust fund must be transferred no less than quarterly into the energy conservation grant fund not to exceed ~~one million~~ two hundred thousand dollars per biennium. The principal and income of the resources trust fund may be expended only pursuant to legislative appropriation and are available to:

a. The state water commission for planning for and construction of water-related projects, including rural water systems. These water-related projects must be those which the state water commission has the authority to undertake and construct pursuant to chapter 61-02; and

b. The industrial commission for the funding of programs for development of renewable energy sources; for studies for development of cogeneration systems that increase the capacity of a system to produce more than one kind of energy from the same fuel; for studies for development of waste products utilization; and for the making of grants and loans in connection therewith.

c. The department of commerce for the funding of programs for development of energy conservation and for the making of grants and loans relating to energy conservation.

2. Twenty percent must be allocated to the common schools trust fund and foundation aid stabilization fund as provided in section 24 of article X of the Constitution of North Dakota.

3. Thirty percent must be allocated to the legacy fund as provided in section 26 of article X of the Constitution of North Dakota.

4. Thirty percent must be allocated and credited to the state's general fund.

SECTION 16. AMENDMENT. Section 57-51.1-07 of the North Dakota Century Code is amended and reenacted as follows:

57-51.1-07. Allocation of moneys in oil extraction tax development fund.

Moneys deposited in the oil extraction tax development fund must be transferred monthly by the state treasurer as follows:

1. Twenty percent must be allocated and credited to the sinking fund established for payment of the state of North Dakota water development bonds, southwest pipeline series, and any moneys in excess of the sum necessary to maintain the accounts within the sinking fund and for the payment of principal and interest on the bonds must be credited to a special trust fund, to be known as the resources trust fund. The resources trust fund must be established in the state treasury and the funds therein must be deposited and invested as are other state funds to earn the maximum amount permitted by law which income must be deposited in the resources trust fund. Three percent of the amount credited to the resources trust fund must be transferred no less than quarterly into the renewable energy development fund, not to exceed three million dollars per biennium. One-half of one percent of the amount credited to the resources trust fund must be transferred no less than quarterly into the energy conservation grant fund not to exceed <u>one million</u> two hundred thousand dollars per biennium. The principal and income of the resources trust fund may be expended only pursuant to legislative appropriation and are available to:

a. The state water commission for planning for and construction of water-related projects, including rural water systems. These water-related projects must be those which the state water commission has the authority to undertake and construct pursuant to chapter 61-02; and

b. The industrial commission for the funding of programs for development of renewable energy sources; for studies for development of cogeneration systems that increase the

capacity of a system to produce more than one kind of energy from the same fuel; for studies for development of waste products utilization; and for the making of grants and loans in connection therewith.

c. The department of commerce for the funding of programs for development of energy conservation and for the making of grants and loans relating to energy conservation.

2. Twenty percent must be allocated to the common schools trust fund and foundation aid stabilization fund as provided in section 24 of article X of the Constitution of North Dakota.

3. Thirty percent must be allocated to the legacy fund as provided in section 26 of article X of the Constitution of North Dakota.

4. Thirty percent must be allocated and credited to the state's general fund.

SECTION 17. AMENDMENT. Subsection 10 to section 61-02-02 of the North Dakota Century Code as amended by section 3 of House Bill No. 1374, as approved by the sixty-fifth legislative assembly, is amended and reenacted as follows:

10. "Water conveyance project" means any surface ~~or subsurface~~ drainage works, bank stabilization, or snagging an clearing of water courses.

SECTION 18. AMENDMENT. Section 61-02-08 of the North Dakota Century Code as amended by section 6 of House Bill No. 1374, as approved by the sixty-fifth legislative assembly, is amended and reenacted as follows:

61-02-08. Meetings of commission.

The commission shall hold at least one meeting every two months at places as it, by resolution, may provide. The governor shall serve as chairman, and the commission shall select a member of the commission to serve as vice chairman. The chairman, or in the chairman's absence or disability, the vice chairman of the commission, may issue a call for any meeting at any time. The governor~~, as chairman,~~ or governor's appointed representative shall preside at all meetings of the commission ~~and in case of the governor's~~, and in case of the absence or disability of the governor and governor's appointed representative, the vice chairman shall preside. ~~The seven appointed members of the commission shall select an appointed member to serve as vice chairman of the commission.~~

SECTION 19. AMENDMENT. Subsection 1 of section 61-02-78 of the North Dakota Century Code is amended and reenacted as follows:

1. An infrastructure revolving loan fund is established on January 1, 2015, within the resources trust fund to provide loans for water supply, flood protection, or other water development and water management projects. Ten percent of oil extraction moneys deposited in the resources trust fund, not to exceed a total deposit from oil extraction moneys of twenty-six million dollars, are made available on a continuing basis for making loans in accordance with this section. Accounts may be established in the resources trust fund as necessary for its management and administration.

SECTION 20. AMENDMENT. Section 61-02-79 of the North Dakota Century Code is amended and reenacted as follows:

61-02-79. Bank of North Dakota - Line of credit.

The Bank of North Dakota shall extend a line of credit not to exceed ~~two hundred~~seventy-five million dollars at a rate ~~that~~of one and one-half percent over the three month London interbank offered rate, but may not exceed ~~one and three quarters~~three percent to the state water commission. The state water commission shall repay the line of credit from funds available in the resources trust fund, water development trust fund, or other funds, as appropriated by the legislative assembly. The state water commission may access the line of credit, as necessary, to provide funding as authorized by the

legislative assembly for ~~water supply projects in suspense, water supply projects identified in section 19 of chapter 54 of the 2015 session laws, and~~ water supply projects approved before June 30, ~~2017~~2019, and flood control projects that have approval for funding before June 30, ~~2017~~2019.

SECTION 21. The new section to chapter 61-03 of the North Dakota Century Code created by section 12 of House Bill No. 1374, as approved by the sixty-fifth legislative assembly, is amended and reenacted as follows:

Economic analysis process required for certain projects.

The state engineer shall develop an economic analysis process for water conveyance projects and flood-related projects expected to cost more than ~~seven hundred fifty thousand~~one million dollars, and a life cycle analysis process for municipal water supply projects. When the state water commission is considering whether to fund a water conveyance project, flood-related project, or water supply project, the state engineer shall review the economic analysis or life cycle analysis, and inform the state water commission of the findings from the analysis and review.

SECTION 22. AMENDMENT. Section 61-29-06 of the North Dakota Century Code is amended and reenacted as follows:

61-29-06. Management.

Channelization, reservoir construction, or diversion other than for agricultural ~~or~~, recreational, or temporary use purposes and the dredging of waters within the confines of the Little Missouri scenic river and all Little Missouri River tributary streams are expressly prohibited. Flood control dikes may be constructed within the floodplain of the Little Missouri River. Diking and riprapping for bank erosion control shall be permitted within the confines of the Little Missouri scenic river. The construction of impoundments for any purpose on the Little Missouri mainstream shall be prohibited.

This chapter shall in no way affect or diminish the rights of owners of the land bordering the river to use the waters for domestic purposes, including livestock watering, or any other rights of riparian landowners.

SECTION 23. AMENDMENT. Section 61-40-05 of the North Dakota Century Code is amended and reenacted as follows:

61-40-05. Authority of the western area water supply authority.

In addition to authority declared under section 61-40-01, the board of directors of the western area water supply authority may:

1. Sue and be sued in the name of the authority.
2. Exercise the power of eminent domain in the manner provided by title 32 or as described in this chapter for the purpose of acquiring and securing any right, title, interest, estate, or easement necessary or proper to carry out the duties imposed by this chapter, and particularly to acquire the necessary rights in land for the construction of an entire part of any pipeline, reservoir, connection, valve, pumping installation, or other facility for the storage, transportation, or utilization of water and all other appurtenant facilities used in connection with the authority. However, if the interest sought to be acquired is a right of way for any project authorized in this chapter, the authority, after making a written offer to purchase the right of way and depositing the amount of the offer with the clerk of the district court of the county in which the right of way is located, may take immediate possession of the right of way, as authorized by section 16 of article I of the Constitution of North Dakota. Within thirty days after notice has been given in writing to the landowner by the clerk of the district court that a deposit has been made for the taking of a right of way as authorized in this subsection, the owner of the property taken may appeal to the district court by serving a notice of appeal upon the

acquiring agency, and the matter must be tried at the next regular or special term of court with a jury unless a jury be waived, in the manner prescribed for trials under chapter 32-15.

3. Accept funds, property, services, pledges of security, or other assistance, financial or otherwise, from federal, state, and other public or private sources for the purpose of aiding and promoting the construction, maintenance, and operation of the authority. The authority may cooperate and contract with the state or federal government, or any department or agency of state or federal government, or any city, water district, or water system within the authority, in furnishing assurances and meeting local cooperation requirements of any project involving treatment, control, conservation, distribution, and use of water.

4. Cooperate and contract with the agencies or political subdivisions of this state or other states, in research and investigation or other activities promoting the establishment, construction, development, or operation of the authority.

5. Appoint and fix the compensation and reimbursement of expenses of employees as the board determines necessary to conduct the business and affairs of the authority and to procure the services of engineers and other technical experts, and to retain attorneys to assist, advise, and act for the authority in its proceedings.

6. Operate and manage the authority to distribute water to authority members and others within or outside the territorial boundaries of the authority and this state.

7. Hold, own, sell, or exchange any and all property purchased or acquired by the authority. All money received from any sale or exchange of property must be deposited to the credit of the authority and may be used to pay expenses of the authority.

8. Enter contracts to obtain a supply of bulk water through the purchase of infrastructure, bulk water sale or lease, which contracts may provide for payments to fund some or all of the authority's costs of acquiring, constructing, or reconstructing one or more water supply or infrastructure.

9. Acquire, construct, improve, and own water supply infrastructure, office and maintenance space in phases, in any location, and at any time.

10. Enter contracts to provide for a bulk sale, lease, or other supply of water for beneficial use to persons within or outside the authority. The contracts may provide for payments to fund some or all of the authority's costs of acquiring, constructing, or reconstructing one or more water system projects, as well as the authority's costs of operating and maintaining one or more projects, whether the acquisition, construction, or reconstruction of any water supply project actually is completed and whether water actually is delivered pursuant to the contracts. The contracts the cities, water districts, and other entities that are members of the western area water supply authority are authorized to execute are without limitation on the term of years.

11. Borrow money as provided in this chapter.

12. Make all contracts, execute all instruments, and do all things necessary or convenient in the exercise of its powers or in the performance of its covenants or duties or in order to secure the payment of its obligations, but an encumbrance, mortgage, or other pledge of property of the authority may not be created by any contract or instrument.

13. Accept from any authorized state or federal agency loans or grants for the planning, construction, acquisition, lease, or other provision of a project, and enter agreements with the agency respecting the loans or grants. Other than state-guaranteed loans, additional debt that may form the basis of a claim for territorial or franchise protection for industrial water sales for oil and gas exploration and production may be acquired by the authority or member entities only upon approval by the industrial commission and the emergency commission.

14. Contract debts and borrow money, pledge property of the authority for repayment of indebtedness, and provide for payment of debts and expenses of the authority.

15. Operate and manage the authority to distribute water to any out-of-state cities or water systems that contract with the authority.

16. Accept, apply for, and hold water allocation permits.

17. Adopt rules concerning the planning, management, operation, maintenance, sale, and ratesetting regarding water sold by the authority. The authority may adopt a rate structure with elevated rates set for project industrial water depot and lateral supplies in recognition that a large component of the project expense is being incurred to meet the demands of industrial users. The industrial water depot and lateral rate structure must be approved in accordance with section 61-40-11.

18. Develop water supply systems; store and transport water; and provide, contract for, and furnish water service for domestic, municipal, and rural water purposes; milling, manufacturing, mining, industrial, metallurgical, and any and all other beneficial uses; and fix the terms and rates therefore. The authority may acquire, construct, operate, and maintain dams, reservoirs, ground water storage areas, canals, conduits, pipelines, tunnels, and any and all treatment plants, works, facilities, improvements, and property necessary the same without any required public vote before taking action.

19. Contract to purchase or improve water supply infrastructure or to obtain bulk water supplies without requiring any vote of the public on the projects or contracts. In relation to the initial construction of the system and for the purposes of entering a contract with the authority, municipalities are exempt from the public voting requirements or water contract duration limitations otherwise imposed by section 40-33-16.

20. Accept assignment by member entities of contracts that obligate member entities to provide a water supply, contracts that relate to construction of water system infrastructure, or other member entity contracts that relate to authorities transferred to the authority under this chapter.

21. Issue revenue bonds to repay its loan obligations to the Bank of North Dakota. For the purpose of issuing such revenue bonds, the provisions of chapters 40-35 and 40-36 apply to the extent necessary and consistent with section 12 of this Act.

SECTION 24. AMENDMENT. Section 61-40-11 of the North Dakota Century Code is amended and reenacted as follows:

61-40-11. Water rates.

~~The authority shall develop an industrial water depot and lateral retail rate and present the rate to the industrial commission for approval. Any industrial water depot and lateral rate adjustment must have approval of the industrial commission before going into effect~~The industrial commission may authorize the authority to contract at competitive, floating, market rates for industrial water depot and lateral retail sales. The authority shall provide a report on the rates to the commission and legislative management's water topics overview committee on a regular basis. The authority shall develop domestic water rates that must include all costs for operation, maintenance, and operating and capital reserves, and debt repayment of all infrastructure managed or constructed by the authority, with the exception of the costs identified in section 61-40-10 which are paid for by industrial water depot and lateral sales.

SECTION 25. TRANSFER - INFRASTRUCTURE REVOLVING LOAN FUND TO RESOURCES TRUST FUND. On July 1, 2017, the state treasurer shall transfer any oil extraction moneys exceeding $26,000,000 which have been deposited in the infrastructure revolving loan fund from the infrastructure revolving loan fund to the resources trust fund.

SECTION 26. LEGISLATIVE MANAGEMENT STUDY - OIL AND GAS INDUSTRIAL WATER USE. During the 2017-18 interim, the legislative management shall study industrial water use of the oil and gas industry. The study must include the recapture of water used in fracking, the recycling of water used in fracking, and other oil and gas activities, fracking methods which do not require the use of water, and taxes or fees other states charge for water used in the oil and gas industry.

~~**SECTION 27. STATE WATER COMMISSION - 2019-21 BIENNIUM BUDGET.** The state water commission, in accordance with section 54-44.1-04, shall prepare its 2019-21 biennium budget request and the office of management and budget shall prepare the draft appropriations Act under section 54-44.1-16 for the state water commission for consideration by the sixty-sixth legislative assembly with funding provided separately in a salaries and wages line item, operating expenses line item, capital assets line item, project carryover line item, new projects line item, and any additional line items as determined necessary by the commission or the office of management and budget. The state water commission shall present funding for projects in a manner consistent with the funding designations identified in section 5 of this Act, for the 2019-21 biennium.~~

SECTION 28. EFFECTIVE DATE - EXPIRATION DATE. Section 15 of this Act becomes effective on August 1, 2017, is effective through July 31, 2019, and after that date is ineffective. Section 16 of this Act becomes effective on August 1, 2019. Sections 17, 18, and 21 of this Act become effective on August 1, 2017.

SECTION 29. CONTINGENT EFFECTIVE DATE. Section 23 of this Act is contingent on certification by the industrial commission to the legislative council that the industrial commission has determined the western area water supply authority shall, with the assistance of the industrial commission and the Bank of North Dakota, repay its obligations to the Bank of North Dakota through the issuance of revenue bonds, as provided under subsection 2 of section 12 of this Act.

SECTION 30. EMERGENCY. Sections 9, 10, 11, 12, 22, 23, and 29 of this Act are declared to be an emergency measure.

Speaker of the House

President of the Senate

Chief Clerk of the House

Secretary of the Senate

This certifies that the within bill originated in the House of Representatives of the Sixty-fifth Legislative Assembly of North Dakota and is known on the records of that body as House Bill No. 1020 and that two-thirds of the members-elect of the House of Representatives voted in favor of said law.

Vote: Yeas 76 Nays 11 Absent 7

Speaker of the House

Chief Clerk of the House

This certifies that two-thirds of the members-elect of the Senate voted in favor of said law.

Vote: Yeas 47 Nays 0 Absent 0

President of the Senate

Secretary of the Senate

Received by the Governor at 1:00 P M. on April 27, 2017.

Approved at 6:15 P M. on May 2, 2017.

Governor

Filed in this office this 3 day of May, 2017,

at 8:30 o'clock A M.

Secretary of State

Agenda E 2)

Sixty-fifth Legislative Assembly of North Dakota
In Regular Session Commencing Tuesday, January 3, 2017

HOUSE BILL NO. 1374
(Representatives Schmidt, D. Anderson, J. Nelson, Sanford, Streyle, Zubke)
(Senators Bekkedahl, Kreun, G. Lee, Luick, Schaible, Sorvaag)

AN ACT to create and enact sections 61-02-14.3, 61-02-80, 61-02-81, and a new section to chapter 61-03 of the North Dakota Century Code, relating to contracts and financial assistance for water projects and duties of the state engineer; and to amend and reenact sections 61-02-01.3, 61-02-01.4, 61-02-02, 61-02-04, 61-02-07, and 61-02-08, subsection 1 of section 61-02-14, and subsection 4 of section 61-02-62 of the North Dakota Century Code, relating to definitions of types of financial assistance for water projects and the composition and operation of the state water commission.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

SECTION 1. AMENDMENT. Section 61-02-01.3 of the North Dakota Century Code is amended and reenacted as follows:

61-02-01.3. Comprehensive water development plan.

Biennially, the commission shall develop and maintain a comprehensive water development plan organized on a river basin perspective, including an inventory of future water projects for budgeting and planning purposes. As part of the commission's planning process, ~~in order~~ to facilitate local project sponsor participation and project prioritization and to assist in ~~project cost-benefit analysis~~education regarding life cycle analyses for municipal water supply projects, and economic analyses for flood control and water conveyance projects expected to cost more than ~~five hundred thousand~~one million dollars, the commission shall develop a policy that outlines procedures for commissioner-hosted meetings within the upper Red River, lower Red River, James River, Mouse River, upper Missouri River, lower Missouri River, and Devils Lake drainage basins.

SECTION 2. AMENDMENT. Section 61-02-01.4 of the North Dakota Century Code is amended and reenacted as follows:

61-02-01.4. State water commission cost-share policy.

The state water commission shall ~~adopt a cost-share policy for the financing of water projects. The policy~~review, gather stakeholder input on, and rewrite as necessary the commission's "Cost-share Policy, Procedure and General Requirements" and "Project Prioritization Guidance" documents. The commission's cost-share policy:

1. Must provide a water supply project is eligible for ~~grants~~a cost-share up to seventy-five percent of the total eligible project costs.

2. May not determine program eligibility of water supply projects based on a population growth factor. However, a population growth factor may be used in prioritizing projects for that purpose.

3. Must consider all project costs potentially eligible for reimbursement, except the commission shall exclude operations expense and regular maintenance, including removal of vegetative materials and sediment, for water conveyance projects and may exclude operations expense and regular maintenance for other projects. The commission shall require a water project sponsor to maintain a capital improvement fund from the rates charged customers for future extraordinary maintenance projects as condition of funding an extraordinary maintenance project.

4. May not determine program eligibility of water supply projects based on affordability. However, affordability may be used in prioritizing projects for that purpose.

SECTION 3. AMENDMENT. Section 61-02-02 of the North Dakota Century Code is amended and reenacted as follows:

61-02-02. Definitions.

In this chapter, unless the context or subject matter otherwise requires:

1. "Commission" means the state water commission.
2. "Cost of works" includes:
   a. The cost of construction, the cost of all lands, property rights, water rights, easements, and franchises acquired which are deemed necessary for such construction;
   b. The cost of all water rights acquired or exercised by the commission in connection with such works;
   c. The cost of all machinery and equipment, financing charges, interest prior to and during construction and for a period not exceeding three years after the completion of construction;
   d. The cost of engineering and legal expenses, plans, specifications, surveys, estimates of cost, and other expenses necessary or incident to determining the feasibility or practicability of any project;
   e. Administrative expenses;
   f. The construction of the works and the placing of the same in operation; and
   g. Such other expenses as may be necessary or incident to the financing authorized in this chapter, including funding of debt service, repair and replacement reserves, capitalized interest, and the payment of bond issuance costs.
3. "Cost-share" means funds appropriated by the legislative assembly or otherwise transferred by the commission to a local entity under commission policy as reimbursement for a percentage of the total approved cost of a project approved by the commission.
4. "Economic analysis" means an estimate of economic benefits and direct costs that result from the development of a project.
5. "Grant" means a one-time sum of money appropriated by the legislative assembly and transferred by the commission to a local entity for a particular purpose. A grant is not dependent on the local entity providing a particular percentage of the cost of the project.
6. "Life cycle analysis" means the summation of all costs associated with the anticipated useful life of a project, including project development, land, construction, operation, maintenance, and disposal or decommissioning.
7. "Loan" means an amount of money lent to a sponsor of a project approved by the commission to assist with funding approved project components. A loan may be stand-alone financial assistance.
8. "Owner" includes all individuals, associations, corporations, limited liability companies, districts, municipalities, and other political subdivisions of this state having any title or interest in any properties, rights, water rights, easements, or franchises to be acquired.

~~4.~~9. "Project" means any one of the works defined in subsection 5, or any combination of such works, which are physically connected or jointly managed and operated as a single unit.

~~5.~~10. "Water conveyance project" means any surface or subsurface drainage works, bank stabilization, or snagging and clearing of water courses.

11. "Works" includes:

a. All property rights, easements, and franchises relating thereto and deemed necessary or convenient for their operation;

b. All water rights acquired and exercised by the commission in connection with such works;

c. All means of conserving and distributing water, including without limiting the generality of the foregoing two subdivisions, reservoirs, dams, diversion canals, distributing canals, channels, lateral ditches, pumping units, mains, pipelines, treatment plants, and waterworks systems; and

d. All works for the conservation, control, development, storage, treatment, distribution, and utilization of water, including without limiting the generality of the foregoing subdivisions, works for the purpose of irrigation, flood control, watering stock, supplying water for public, domestic, industrial, and recreational use, fire protection, and the draining of lands injured or in danger of injury as a result of such water utilization.

SECTION 4. AMENDMENT. Section 61-02-04 of the North Dakota Century Code is amended and reenacted as follows:

61-02-04. State water commission - Members - Terms - Qualifications.

The state water commission ~~shall consist~~consists of the governor, agriculture commissioner, and seven other members ~~to be~~ appointed by the governor who shall take into account reasonable geographic considerations in making ~~such~~the appointments with the intent of having each of the seven major drainage basins represented by a commissioner who resides in the basin. The major drainage basins are the upper Missouri River basin, the lower Missouri River basin, the James River basin, the upper Red River basin, the lower Red River basin, the Mouse River basin, and the Devils Lake basin. The governor or the agriculture commissioner, or both, may appoint a representative to serve in that official's capacity at ~~such~~ meetings ~~as~~ that official ~~may be~~is unable to attend. The seven appointive members of the commission must be appointed for a term of six years each with ~~their~~the terms of office so arranged that two terms and not more than three terms expire on the first day of July of each odd-numbered year. Each appointive member must be a qualified elector of the state and is subject to removal by judicial procedure. In case of a vacancy, the vacancy must be filled by appointment by the governor for the remainder of the unexpired term. Before entering upon the discharge of official duties, each appointive member shall take, subscribe, and file with the secretary of state the oath prescribed for civil officers.

SECTION 5. AMENDMENT. Section 61-02-07 of the North Dakota Century Code is amended and reenacted as follows:

61-02-07. Quorum - What constitutes.

A majority of the members of the commission ~~shall constitute~~constitutes a quorum, and the affirmative or negative vote of five members ~~shall be~~is necessary to bind the commission except for adjournment.

SECTION 6. AMENDMENT. Section 61-02-08 of the North Dakota Century Code is amended and reenacted as follows:

61-02-08. Meetings of commission - Chairman and vice chairman.

The commission ~~may hold meetings at such times and~~shall hold at least one meeting every two months at ~~such~~ places as it, by resolution, may provide. The chairman, or in the chairman's absence or disability, the vice chairman of the commission, may issue a call for any meeting at any time. The governor, as chairman, shall preside at all meetings of the commission and in case of the governor's absence or disability, the vice chairman shall preside. The seven appointed members of the commission shall select an appointed member to serve as vice chairman of the commission.

SECTION 7. AMENDMENT. Subsection 1 of section 61-02-14 of the North Dakota Century Code is amended and reenacted as follows:

1. To investigate, plan, regulate, undertake, construct, establish, maintain, control, operate, and supervise all works, dams, and projects, public and private, which in its judgment may be necessary or advisable:

   a. To control the low-water flow of streams in the state.

   b. To impound water for the improvement of municipal, industrial, and rural water supplies.

   c. To control and regulate floodflow in the streams of the state to minimize the damage of such floodwaters.

   d. To conserve and develop the waters within the natural watershed areas of the state and, subject to vested rights, to divert the waters within a watershed area to another watershed area and the waters of any river, lake, or stream into another river, lake, or stream.

   e. To improve the channels of the streams for more efficient transportation of the available water in the streams.

   f. To provide sufficient water flow for the abatement of stream pollution.

   g. To develop, restore, and stabilize the waters of the state for domestic, agricultural, and municipal needs, irrigation, flood control, recreation, and wildlife conservation by the construction and maintenance of dams, reservoirs, and diversion canals.

   h. To promote the maintenance of existing drainage channels in agricultural lands and to construct any needed channels.

   i. To provide more satisfactory subsurface water supplies for the municipalities of the state.

   j. To finance the construction, establishment, operation, and maintenance of public and private works, dams, and irrigation projects, which in its judgment may be necessary and advisable, except the commission may not provide a cost-share for the costs of operation or maintenance, including removal of vegetative materials and sediment, of a water conveyance project.

   k. To provide for the storage, development, diversion, delivery, and distribution of water for the irrigation of agricultural land and supply water for municipal and industrial purposes.

   l. To provide for the drainage of lands injured by or susceptible of injury from excessive rainfall or from the utilization of irrigation water, and subject to the limitations prescribed by law, to aid and cooperate with the United States and any department, agency, or officer thereof, and with any county, township, drainage district, or irrigation district of this state, or of other states, in the construction or improvement of such drains.

   m. To provide water for stock.

n. To provide water for the generation of electric power and for mining and manufacturing purposes.

SECTION 8. Section 61-02-14.3 of the North Dakota Century Code is created and enacted as follows:

61-02-14.3. Commission agreements - Terms, conditions, and reapplication.

An agreement for funding which is approved by the commission to fund a water project under this chapter must require a progress report to the commission at least every four years if the term of the project exceeds four years. If a progress report is not timely received or, if after a review of a progress report, the commission determines the project has not made sufficient progress, the commission may terminate the agreement for project funding. The project sponsor may submit a new application to the commission for funding for a project for which the commission previously terminated funding.

SECTION 9. AMENDMENT. Subsection 4 of section 61-02-62 of the North Dakota Century Code is amended and reenacted as follows:

4. Covenant to fix and establish such prices, rates, and charges for water and other services made available in connection with the works or project as to provide at all times funds together with other funds the commission may pledge which will be sufficient:

   a. To pay all costs of operation and maintenance of the works or project, as permitted under this chapter, together with necessary repairs thereto;

   b. To meet and pay the principal and interest of all the bonds as they severally become due and payable; and

   c. To create such reserves for the principal and interest of all the bonds and for the meeting of contingencies in the operation, repair, replacement, and maintenance of the works or project as the commission shall determine.

SECTION 10. Section 61-02-80 of the North Dakota Century Code is created and enacted as follows:

Flood control projects - Financial assistance limited.

Except for flood control projects authorized by the legislative assembly or the commission before July 1, 2017, the commission shall calculate the amount of its financial assistance, including loans, grants, cost-share, and issuance of bonds, based on the needs for protection of health, property, and enterprise, against:

1. One hundred year flood events as determined by a federal agency;

2. The national economic development alternative; or

3. The local sponsor's preferred alternative if the commission first determines the historical flood prevention costs and flood damages, and the risk of future flood prevention costs and flood damages, warrant protection to the level of the local sponsor's preferred alternative.

SECTION 11. Section 61-02-81 of the North Dakota Century Code is created and enacted as follows:

Development in breach inundation zones - No financial assistance for dam improvements.

Notwithstanding any other provision of law, if a political subdivision permits building or development within a breach inundation zone and the building or development causes a change in a dam's current hazard classification necessitating structural improvements or upgrades to the dam, the political subdivision shall pay for the necessary improvements or upgrades. State loans, grants, cost-share, and

other financial assistance may not be provided to pay for the dam improvements or upgrades. For purposes of this section, "breach inundation zone" means the area downstream of the dam which would be flooded in the event of a dam failure or uncontrolled release of water.

SECTION 12. A new section to chapter 61-03 of the North Dakota Century Code is created and enacted as follows:

Economic analysis process required for certain projects.

The state engineer shall develop an economic analysis process for water conveyance projects and flood-related projects expected to cost more than seven hundred fifty thousand dollars, and a life cycle analysis process for municipal water supply projects. When the state water commission is considering whether to fund a water conveyance project, flood-related project, or water supply project, the state engineer shall review the economic analysis or life cycle analysis, and inform the state water commission of the findings from the analysis and review.

Speaker of the House

President of the Senate

Chief Clerk of the House

Secretary of the Senate

This certifies that the within bill originated in the House of Representatives of the Sixty-fifth Legislative Assembly of North Dakota and is known on the records of that body as House Bill No. 1374.

House Vote:	Yeas 82	Nays 8	Absent 4
Senate Vote:	Yeas 25	Nays 22	Absent 0

Chief Clerk of the House

Received by the Governor at 8:30A M. on April 13, 2017.

Approved at 3:27P M. on April 18, 2017.

Governor

Filed in this office this 18 day of April, 2017,

at 4:30 o'clock P M.

Secretary of State

North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
(701) 328-2750 • TTY 1-800-366-6888 • FAX (701) 328-3696 • http://swc.nd.gov

Agenda #1

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer/Secretary
SUBJECT: NDSWC Cost-Share Request – City of Minot
Levee Repair and Bank Stabilization Project
DATE: May 25, 2017

In their correspondence dated April 28, 2017, the City of Minot (City) requested cost share assistance for their Levee Repair and Bank Stabilization Project.

The project is located in the City of Minot and is for project components that have been identified as being necessary by the System Wide Improvement Framework (SWIF) which has gone through multiple levels of review by the USACE.

The United States Army Corps of Engineers perform annual inspections on the Mouse River flood control system through Minot. These inspections identified multiple deficiencies that pose a risk to the integrity of the flood control system. The deficiencies proposed to be resolved by this project include channel bank failures effecting system stability, trees along the channel bank failures, trees that pose a risk to the levees, construction of flood control levees in a discontinuous reach, and improving stability of a damaged river grade control structure. The work included in this cost share request is consistent with the SWIF. Engineering design will be completed in the summer of 2017 with construction beginning in late summer or fall 2017.

The estimated total cost of the project is $1,974,095, of which $86,267 is for tree removals which are considered deferred maintenance and therefore ineligible. A total of $164,508 is eligible for state cost-share assistance at 35 percent ($57,578) for eligible pre-construction costs, $1,413,146 is eligible at 50 percent ($706,573) for eligible bank stabilization costs and construction engineering, and $310,172 is eligible at 60 percent ($186,103) for flood protection costs for a total cost share not to exceed $950,254 in state funds.

I recommend the State Water Commission approve this request by the City of Minot for state cost participation in the Levee Repair, Bank Stabilization and Snagging Project, at an amount not to exceed $950,254 in state funds. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits and the availability of funds.

GE:bn/2107

City of Minot

Public Works Department

April 28, 2017

North Dakota State Water Commission
ATTN: Cost-Share Program
900 East Boulevard
Bismarck, ND 58505-0850

RE: Cost Share Request – City of Minot 2017 Levee Repair, Bank Stabilization, and Snagging Project

This Mouse River flood control system provides flood protection for the City of Minot and has a significant risk to loss of life if a failure occurs. The USACE performs annual inspections on the Mouse River flood control system through Minot to assess the condition of the system. These inspections identified multiple deficiencies that pose a risk to the integrity of the flood control system. In order to address these deficiencies, the City of Minot developed a System Wide Improvement Framework (SWIF) that outlines the City's strategy for addressing the system's deficiencies. The work included in this cost share request is consistent with the System Wide Improvement Framework (SWIF).

The deficiencies proposed to be resolved by this project include channel bank failures effecting system stability, trees along the channel bank that are compromising the integrity of the levees, discontinuous levee segments that require emergency measures during flood events, and damage to one of the river grade control structures. This project will stabilize the channel bank failures, remove trees that pose a risk to the levees, construct flood control levees in a discontinuous reach, and improve stability of a damaged river grade control structure. The project is scheduled to be designed and bid in 2017. Construction is anticipated to begin in 2017 and be completed in 2018.

With this letter and the attached supporting documentation, the City of Minot respectfully requests cost-share from the North Dakota State Water Commission for 50 percent of eligible construction and construction engineering costs related to Snagging and Clearing and Bank Stabilization activities, 60 percent of eligible construction and construction engineering costs related to Flood Protection activities, and 35 percent of eligible design engineering costs. The total estimate project cost at this time is $1,974,094.51 and the requested Cost Share amount is $993,388.30.

If you have any questions, please feel free to contact me or our project engineer, Mike Love, Houston Engineering, Inc. at 701-237-5065.

Dan Jonasson
Public Works Director, City of Minot

CC: Mike Love, Houston Engineering, Inc., Fargo, ND

Preliminary Opinion of Probable Costs
City of Minot 2017 Levee Repair, Bank Stabilization, and Snagging Project
Minot, North Dakota
April 28, 2017

Area 1 - Central Ave W					
No.	**Item**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
	Snagging and Clearing				
1	Mobilization	LS	1	$2,875.00	$2,875.00
2	Site Restoration (Seeding and Topsoiling)	LS	1	$2,300.00	$2,300.00
3	Snagging and Clearing	AC	0.2	$34,500.00	$6,900.00
				Snagging and Clearing Estimated Total Cost	***$12,075.00***
				Area 1 Estimated Construction Cost	**$12,075.00**

Area 2 - 4th St SW					
No.	**Item**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
	Snagging and Clearing				
1	Mobilization	LS	1	$1,150.00	$1,150.00
2	Site Restoration (Seeding and Topsoiling)	LS	1	$575.00	$575.00
3	Remove Tree	EA	1	$862.50	$862.50
				Snagging and Clearing Estimated Total Cost	***$2,587.50***
				Area 2 Estimated Construction Cost	**$2,587.50**

Area 3 - Roosevelt Park					
No.	**Item**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
	Snagging and Clearing				
1	Mobilization	LS	1	$5,750.00	$5,750.00
2	Site Restoration (Seeding and Topsoiling)	LS	1	$11,500.00	$11,500.00
3	Snagging and Clearing	AC	2.0	$23,000.00	$46,000.00
4	Remove Tree	EA	9	$575.00	$5,192.25
				Snagging and Clearing Estimated Construction Cost	***$68,442.25***
				Area 3 Estimated Construction Cost	**$68,442.25**

Area 4 - 14th St SE					
No.	**Item**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
	Bank Stabilization				
1	Mobilization	LS	1	$23,000.00	$23,000.00
2	Site Restoration (Seeding and Topsoiling)	LS	1	$5,750.00	$5,750.00
3	Excavation - Slope Grading	CY	352	$40.25	$14,168.00
4	Granular Fill	TON	33	$92.00	$3,036.00
5	NDDOT Grade 2 Riprap	TON	468	$143.75	$67,336.76
6	Traffic Control	LS	1	$2,300.00	$2,300.00
7	Erosion Control	LS	1	$5,750.00	$5,750.00
				Bank Stabilization Estimated Construction Cost	***$121,340.76***
				Area 4 Estimated Construction Cost	**$121,340.76**

Preliminary Opinion of Probable Costs
City of Minot 2017 Levee Repair, Bank Stabilization, and Snagging Project
Minot, North Dakota
April 28, 2017

Area 5 - 15th St SE					
No.	**Item**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
	Flood Protection				
1	Mobilization	LS	1	$11,500.00	$11,500.00
2	Site Restoration (Seeding and Topsoiling)	LS	1	$11,500.00	$11,500.00
3	Clearing and Grubbing	LS	1.0	$5,750.00	$5,750.00
4	Exploration Trench	CY	2,337	$23.00	$53,751.00
5	Fill - Impervious (Import)	CY	1,927	$28.75	$55,401.25
6	Topsoil Import	CY	100	$34.50	$3,450.00
7	Traffic Control	LS	1	$3,450.00	$3,450.00
8	Erosion Control	LS	1	$5,750.00	$5,750.00
	Flood Protection Estimated Construction Cost				***$150,552.25***
	Snagging and Clearing				
9	Mobilization	LS	1	$1,150.00	$1,150.00
10	Site Restoration (Seeding and Topsoiling)	LS	1	$1,150.00	$1,150.00
11	Remove Tree	EA	1	$862.50	$862.50
	Snagging and Clearing Estimated Construction Cost				***$3,162.50***
	Area 5 Estimated Construction Cost				**$153,714.75**

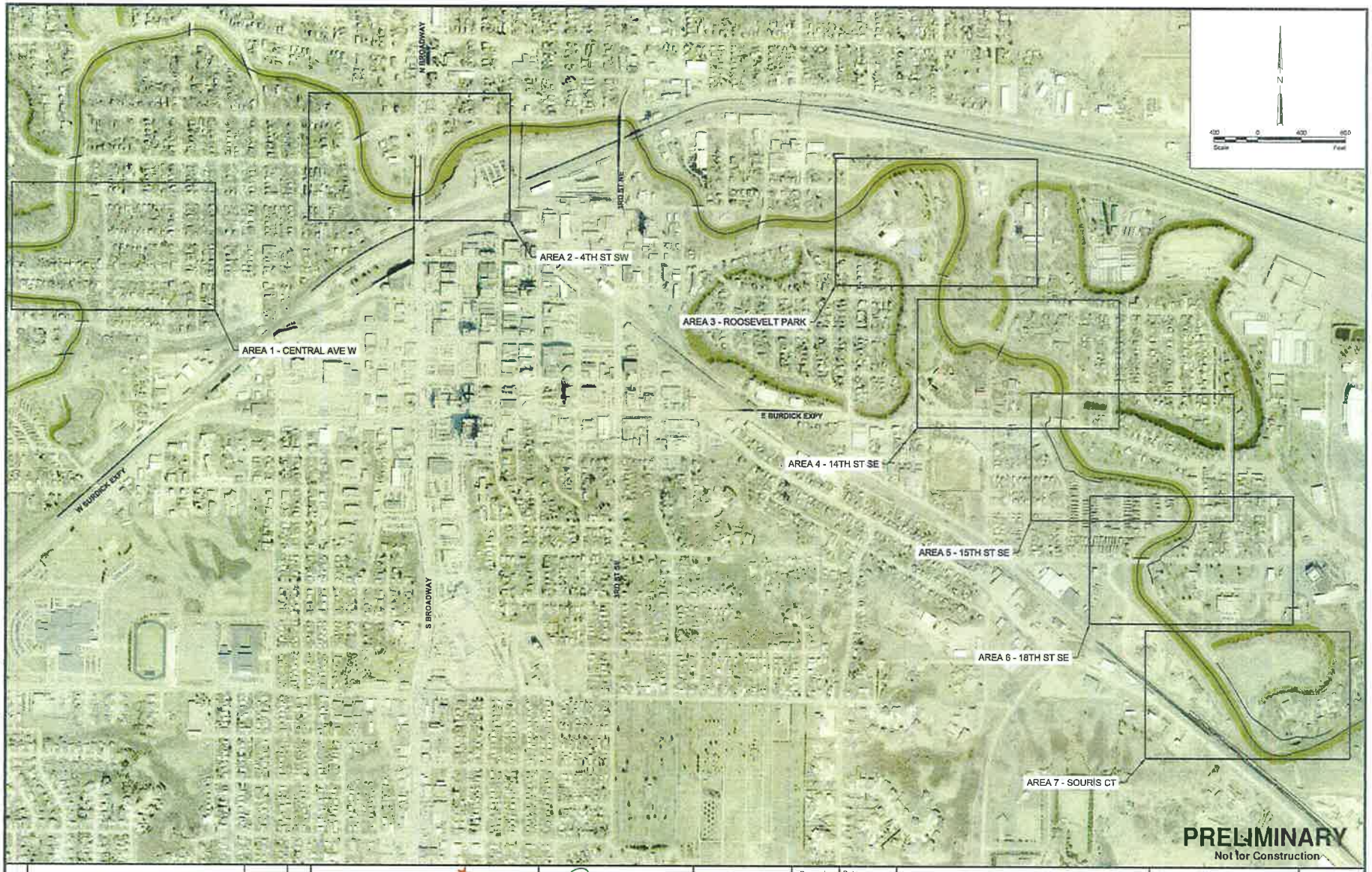
Area 6 - 18th St SE					
No.	**Item**	**Unit**	**Quantity**	**Unit Price**	**Total Price**
	Flood Protection				
1	Mobilization	LS	1	$11,500.00	$11,500.00
2	Site Restoration (Seeding and Topsoiling)	LS	1	$11,500.00	$11,500.00
3	Clearing and Grubbing	LS	1	$5,750.00	$5,750.00
4	Exploration Trench	CY	1,635	$23.00	$37,605.00
5	Fill - Impervious (Import)	CY	2,892	$28.75	$83,145.00
6	Topsoil Import	CY	60	$34.50	$2,070.00
7	Traffic Control	LS	1	$2,300.00	$2,300.00
8	Erosion Control	LS	1	$5,750.00	$5,750.00
	Flood Protection Estimated Construction Cost				***$159,620.00***
	Area 6 Estimated Construction Cost				**$159,620.00**

Preliminary Opinion of Probable Costs
City of Minot 2017 Levee Repair, Bank Stabilization, and Snagging Project
Minot, North Dakota
April 28, 2017

Area 7 - Souris Ct					
No.	*Item*	*Unit*	*Quantity*	*Unit Price*	*Total Price*
	Bank Stabilization				
1	Mobilization	LS	1	$57,500.00	$57,500.00
2	Site Restoration (Seeding and Topsoiling)	LS	1	$35,500.00	$35,500.00
3	Clearing and Grubbing	LS	1	$28,750.00	$28,750.00
4	Remove and Replace Fence	LS	1	$5,750.00	$5,750.00
5	Levee Removal	CY	1,279	$23.00	$29,417.00
6	Mouse River Sediment Removal	CY	2,075	$28.75	$59,656.25
7	Exploration Trench	CY	1,724	$23.00	$39,652.00
8	Excavation - Slope Grading	CY	2,803	$40.25	$112,820.75
9	Fill - Impervious (Import)	CY	4,884	$28.75	$140,415.00
10	Granular Fill	TON	257	$92.00	$23,644.00
11	NDDOT Grade 2 Riprap	TON	3,672	$143.75	$527,850.00
12	Drop Structure Repair - Large Rock Installation	LS	1	$17,250.00	$17,250.00
13	Install Gravel Access Road	SY	462	$57.50	$26,565.00
14	Topsoil Import	CY	253	$34.50	$8,728.50
15	Traffic Control	LS	1	$2,300.00	$2,300.00
16	Erosion Control	LS	1	$11,500.00	$11,500.00
				Bank Stabilization Estimated Construction Cost	***$1,127,298.50***
				Area 7 Estimated Construction Cost	**$1,127,298.50**
				Total Estimated Construction Cost	**$1,645,078.76**
	Engineering Services				
				Estimated Design Engineering (10%)	$164,507.88
				Estimated Construction Engineering (10%)	$164,507.88
				Total Estimated Engineering Services	**$329,015.75**
				Total Estimated Project Cost	**$1,974,094.51**

Cost Share Calculations

Item	Total Project Cost	SWC Cost Share	SWC Cost Share	Local Cost Share
Snagging and Clearing	$86,267.25	50%	$43,133.63	$43,133.63
Bank Stabilization	$1,248,639.26	50%	$624,319.63	$624,319.63
Flood Protection	$310,172.25	60%	$186,103.35	$124,068.90
Design Engineering	$164,507.88	35%	$57,577.76	$106,930.12
Construction Engineering	$164,507.88	50%	$82,253.94	$82,253.94
Totals	**$1,974,094.51**		**$993,388.30**	**$980,706.21**



No.	Revision	Date	By	City of Minot	Houston Engineering Inc.	Fargo P: 701.237.5065 F: 701.237.5101	Drawn by BAU Checked by MPL	Date 4-28-2017 Scale AS SHOWN	CITY OF MINOT 2017 LEVEE REPAIR, BANK STABILIZATION, AND SNAGGING PROJECT MINOT, NORTH DAKOTA	OVERALL PROJECT NO. 6027-050	SHEET 1 of 8

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City of Minot

Houston Engineering Inc

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F: 701.237.5101

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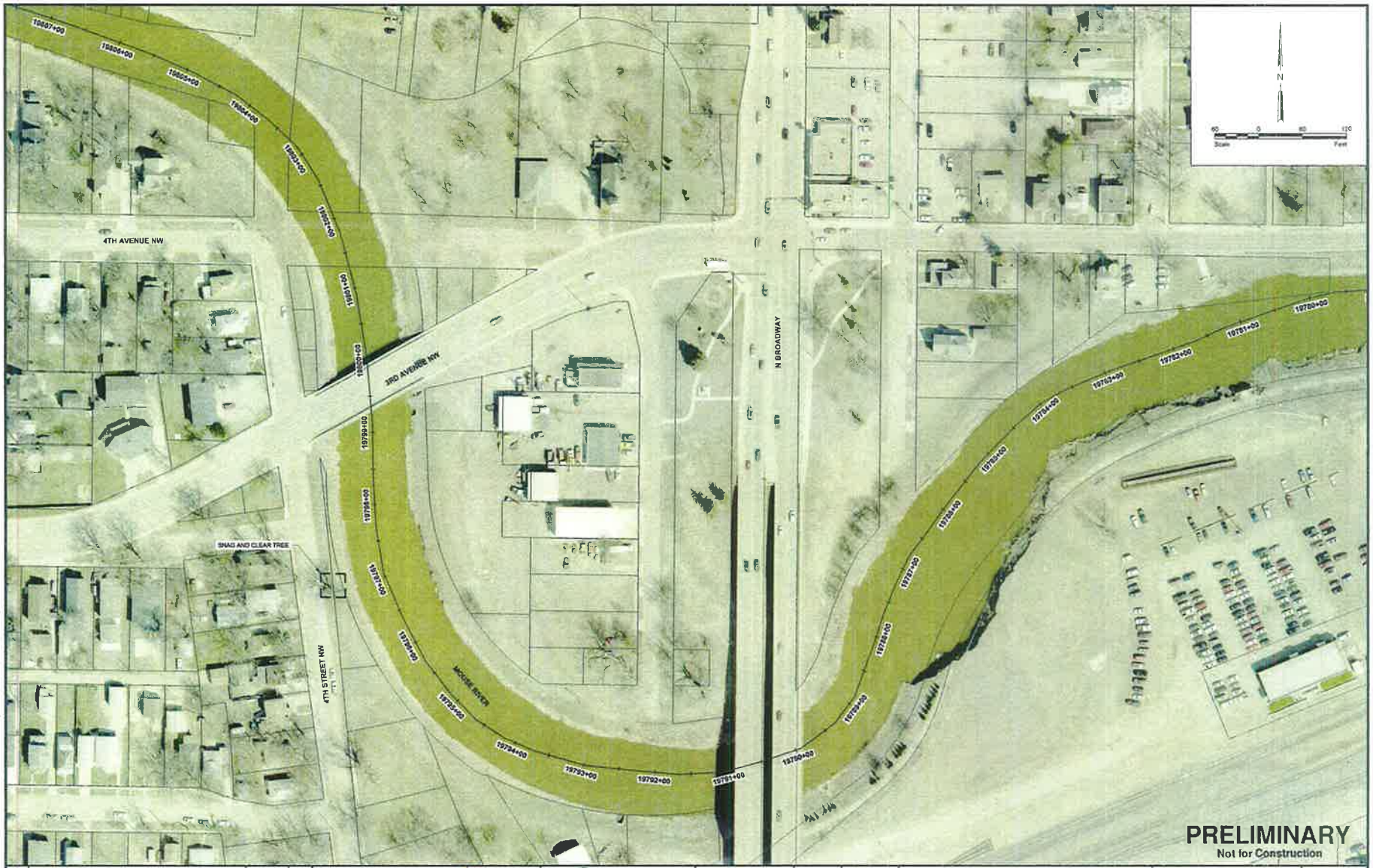
Checked by	MPL
Date	4-28-2017
Scale	AS SHOWN

CITY OF MINOT 2017 LEVEE REPAIR, BANK STABILIZATION, AND SNAGGING PROJECT
MINOT, NORTH DAKOTA

CONCEPTUAL SITE PLAN
AREA 1 - CENTRAL AVE W
PROJECT NO. 6027-050

SHEET
2 of 8



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City of Minot

Houston Engineering Inc.

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CITY OF MINOT 2017 LEVEE REPAIR, BANK STABILIZATION, AND SNAGGING PROJECT
MINOT, NORTH DAKOTA

CONCEPTUAL SITE PLAN
AREA 2 - 4TH ST SW
PROJECT NO. 6027-050

SHEET
3 of 8

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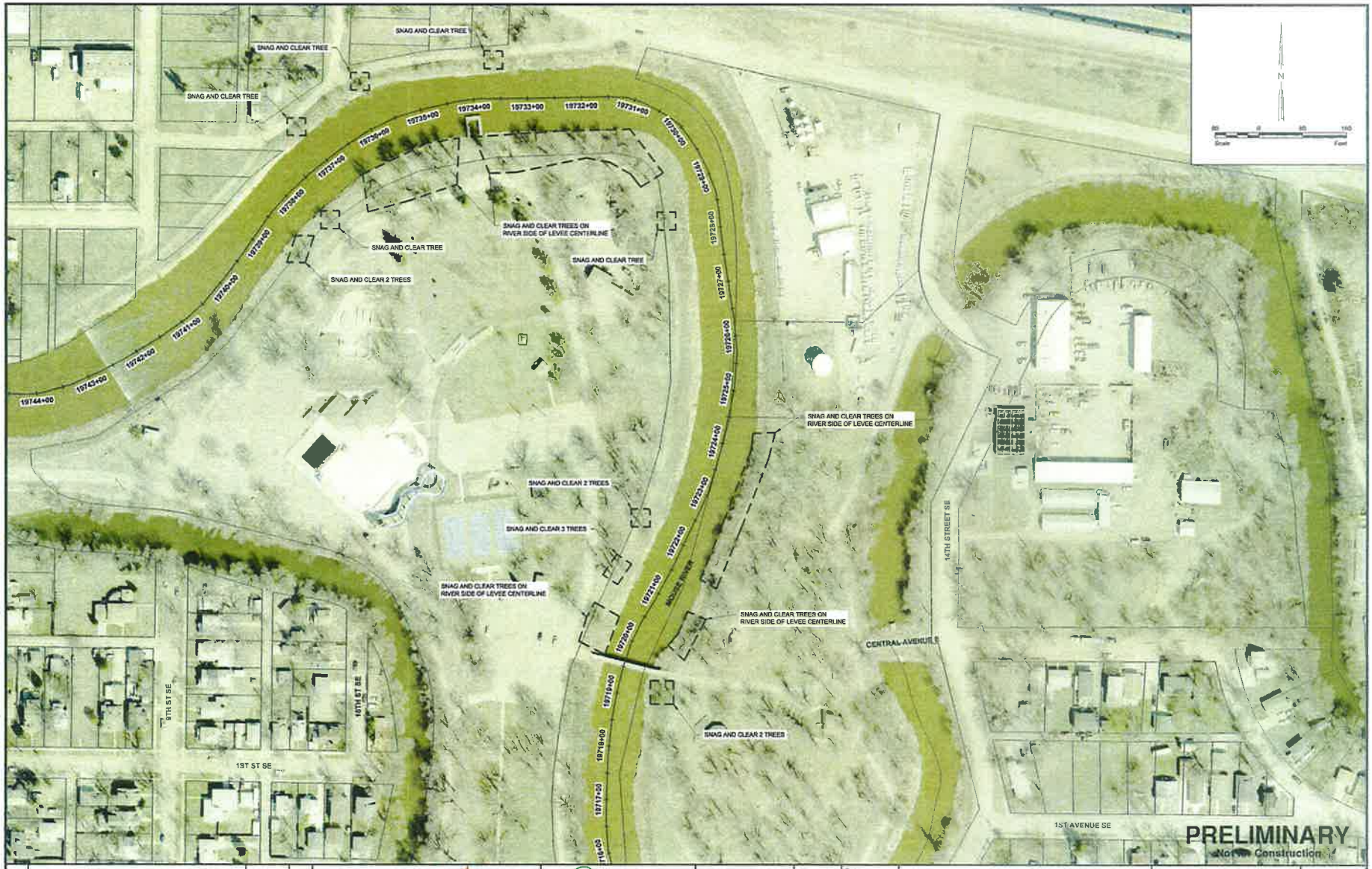
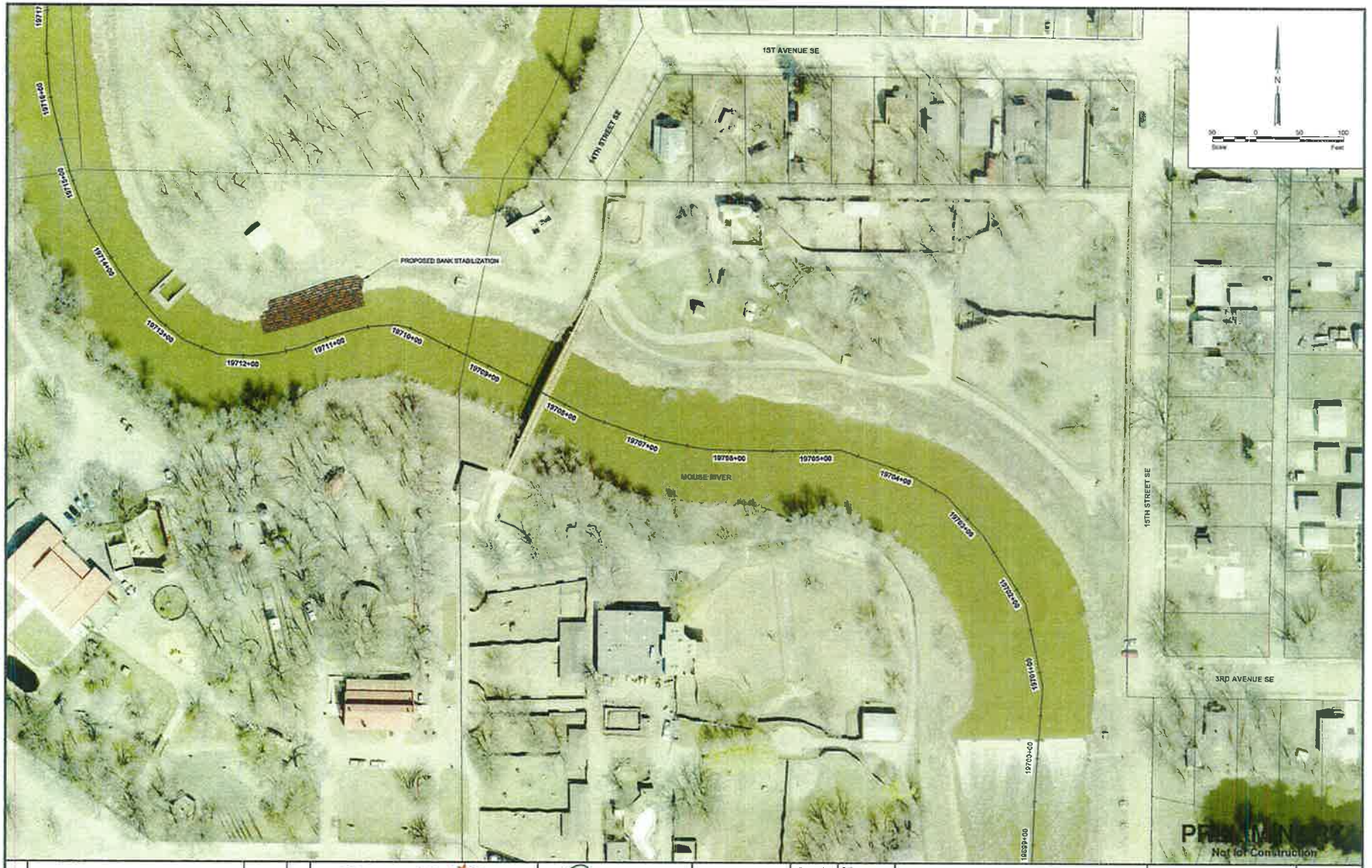


No.	Revision	Date	By	City of Minot	Houston Engineering Inc	Fargo P: 701.237.5065 F: 701.237.5101	Drawn by BAU / Checked by MPL	Date 4-28-2017 / Scale AS SHOWN	CITY OF MINOT 2017 LEVEE REPAIR, BANK STABILIZATION, AND SNAGGING PROJECT MINOT, NORTH DAKOTA	CONCEPTUAL SITE PLAN AREA 3 - ROOSEVELT PARK PROJECT NO. 6027-050	SHEET 4 of 8



No.	Revision	Date	By	City of Minot	Houston Engineering Inc.	Fargo P: 701.237.5065 F: 701.237.5101	Drawn by BAU Checked by MPL	Date 4-28-2017 Scale AS SHOWN	CITY OF MINOT 2017 LEVEE REPAIR, BANK STABILIZATION, AND SNAGGING PROJECT MINOT, NORTH DAKOTA	CONCEPTUAL SITE PLAN AREA 4 - 14TH ST SE PROJECT NO. 6027-050	SHEET 5 of 8

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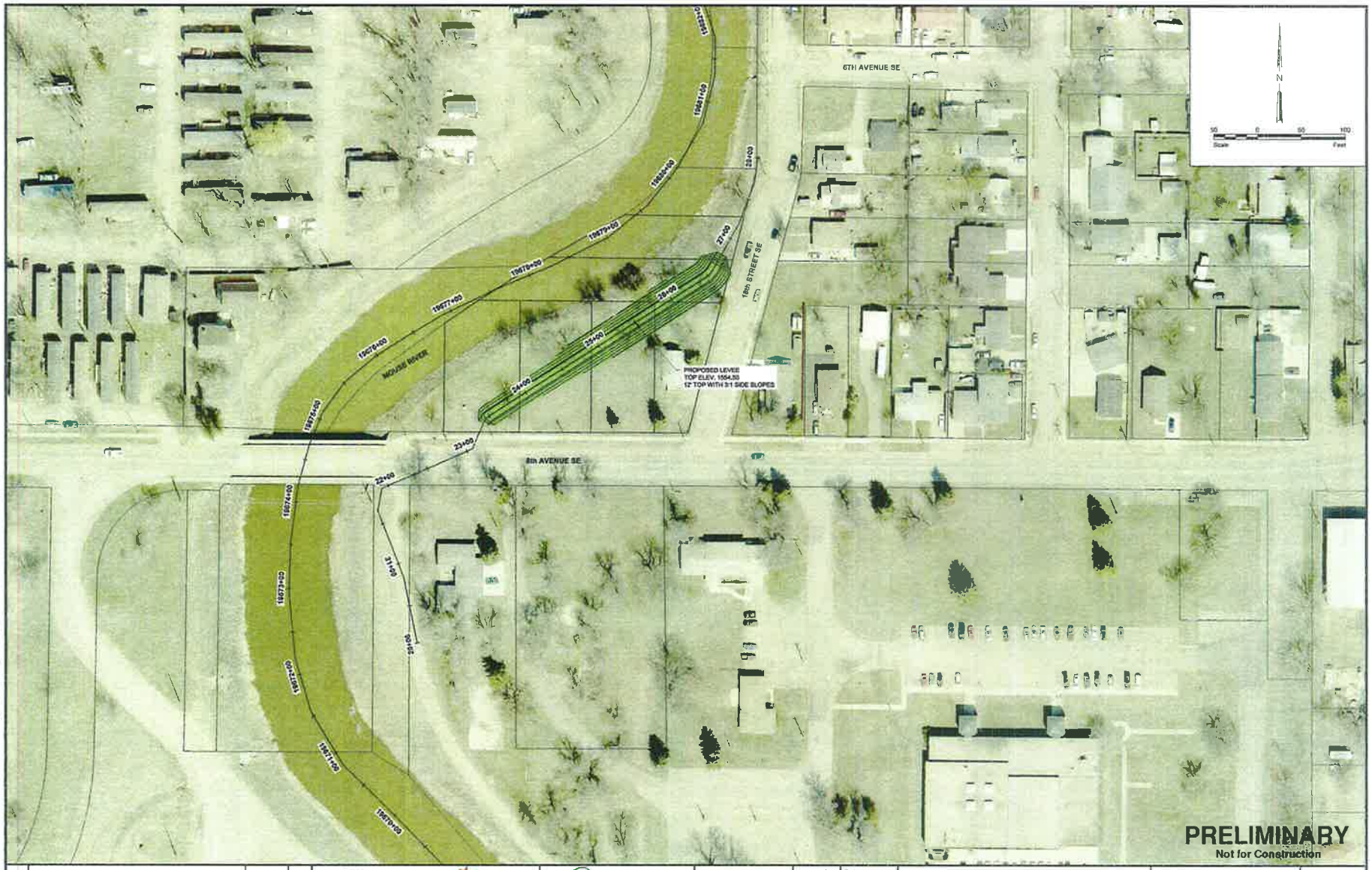
PRELIMINARY
Not for Construction

No	Revision	Date	By	City of Minot	Houston Engineering Inc	Fargo P 701.237.5065 F 701.237.5101	Drawn by BAU Checked by MPL	Date 4-28-2017 Scale AS SHOWN	CITY OF MINOT 2017 LEVEE REPAIR, BANK STABILIZATION, AND SNAGGING PROJECT MINOT, NORTH DAKOTA	CONCEPTUAL SITE PLAN AREA 5 - 15TH ST SE PROJECT NO. 6027-050	SHEET 6 of 8



No.	Revision	Date	By	City of Minot	Houston Engineering Inc.	Fargo Ph: 701.237.5065 Fx: 701.237.5101	Drawn by BAU Checked by MPL	Date 4-28-2017 Scale AS SHOWN	CITY OF MINOT 2017 LEVEE REPAIR, BANK STABILIZATION, AND SNAGGING PROJECT MINOT, NORTH DAKOTA	CONCEPTUAL SITE PLAN AREA 6 - 18TH ST SE PROJECT NO. 6027-050	SHEET 7 of 8

No.	Revision	Date	By

City of Minot

Houston Engineering Inc.

Fargo
P: 701.237.5065
F: 701.237.5101

Drawn by: BAU
Checked by: MPL
Date: 4-28-2017
Scale: AS SHOWN

CITY OF MINOT 2017 LEVEE REPAIR, BANK STABILIZATION, AND SNAGGING PROJECT
MINOT, NORTH DAKOTA

CONCEPTUAL SITE PLAN
AREA 7 - SOURIS CT
PROJECT NO. 6027-050

SHEET
8 of 8

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North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
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Agenda F-2)

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer/Secretary
SUBJECT: NDSWC Cost-Share Request – Bottineau County Water Resource District
Haas Coulee Legal Drain Phase II
DATE: May 31, 2017

In their correspondence dated May 23, 2017, the Bottineau County Water Resource District requested cost share assistance for their Haas Coulee Legal Drain Phase II.

The project is located in Bottineau County, North Dakota. The drainage in Wheaton, Hoffman, Sherman, Renville, and Hasting Townships contain areas that are poorly defined and the slope of the land is flat. Spring snow melt and summer rain caused flooding of large areas of cropland.

On September 15, 2014, $500,000 was approved by the State Water Commission for Haas Coulee Drain Phase I. The proposed Phase II involves improvements within the upper portion of the contributing watershed, upstream of Phase I. Drain permit No. 4952 is pending. The assessment district has been approved. Construction is anticipated to begin in August 2017.

The estimated total cost of the Haas Coulee Legal Drain Phase II is $330,488, of which $191,914 is eligible for state cost-share assistance at 45 percent for total cost share amount not to exceed $86,361 in state funds.

I recommend the State Water Commission approve this request by the Bottineau County Water Resource District for state cost participation in the Haas Coulee Legal Drain Phase II at an amount not to exceed $86,361. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits and the availability of funds.

GE:bn/2042

Apex Engineering Group
Water | Transportation| Municipal | Facilities

701.323.3950
600 South 2nd Street, Suite 145
Bismarck, ND 58504

May 23, 2017

Craig Odenbach, PE
ND State Water Commission
900 E Boulevard Ave #770
Bismarck, ND 58505

RE: Haas Coulee Phase II

Dear Craig:

This is an update on our request for cost share of the Haas Coulee Phase II project:

1) The project is within the Haas Coulee Legal Drain Assessment District.
2) The construction is anticipated to begin in August 2017 and to be completed by December 1, 2017. The construction bids were lower than the engineer's estimate. Attached is an updated cost-share request using the contractor bid prices. The Bottineau County Water Resource District is only applying for cost-share for the items where there are proposed channel improvements, Section B – Sheets 1-8 on attached final Haas Coulee Legal Drain plan set.
3) Construction and O&M easements have been secured along the Hass Coulee channel.
4) A US Army Corp of Engineers 404 Permit has been issued for Phase II of the Haas Coulee project.
5) Interim financing has been obtained.
6) The SWC drainage permit is currently be processed by your office.

If you have any questions, please call me at 701-323-3967. Thank you for the time you and your staff have spent on behalf of the Bottineau County Water District.

Sincerely,

Apex Engineering Group, Inc.

Jennifer Malloy, P.E.
Design Engineer

cc: Clif Issendorf

COST-SHARE REQUEST FORM

NORTH DAKOTA STATE WATER COMMISSION
DEVELOPMENT DIVISION
SFN 60439 (10/2015)

This form is to be filled out by the project or program sponsor with State Water Commission staff assistance as needed. Applications for cost-share are accepted at any time. However, applications received less than 30 days before a State Water Commission meeting will be held for consideration at the next scheduled meeting.

Please answer the following questions as completely as possible. Supporting documents such as maps, detailed cost estimates, and engineering reports should be attached to this form. If additional space is required, please use extra sheets as necessary.

For information regarding cost-share program eligibility see the *State Water Commission Cost-Share Policy, Procedure, and General Requirements* – available upon request or at www.swc.nd.gov.

Project, Program, Or Study Name
Haas Coulee Phase II

Sponsor(s)
Bottineau County Water Resource District

County	City	Township/Range
Bottineau	Bottineau	See Description Below

Description Of Request ☐ New ☒ Updated (previously submitted)

Specific Needs Addressed By The Project, Program, Or Study
Rural Agricultural Drainage

If Study, What Type ☐ Water Supply ☐ Hydrologic ☐ Floodplain Mgmt. ☐ Feasibility ☐ Other

If Project/Program

☐ Flood Control	☐ Multi-Purpose	☐ Bank Stabilization	☐ Dam Safety/EAP
☐ Recreation	☐ Water Supply	☐ Snagging & Clearing	☐ Property Acquisition
☐ Irrigation	☐ Water Retention	☒ Rural Flood Control	☐ Other

Jurisdictions/Stakeholders Involved
Bottineau County Water Resource District

Description Of Problem Or Need And How Project Addresses That Problem Or Need
The drainage in the Wheaton Township (163-83), Hoffman Township (162-83), Sherman Township (162-82), Renville Township (161-82), and Hasting Township (161-81) contains areas that are poorly defined and the slope of the land is very flat. Spring snow melt and summer rain caused flooding of large areas of cropland. The Haas Coulee Drain is designed to reduce the extent and duration of flooding.

Has Feasibility Study Been Completed?	☐ Yes	☐ No	☐ Ongoing	☒ Not Applicable
Has Engineering Design Been Completed?	☒ Yes	☐ No	☐ Ongoing	☐ Not Applicable
Have Land Or Easements Been Acquired?	☐ Yes	☐ No	☒ Ongoing	☐ Not Applicable

Have You Applied For Any State Permits?	☒ Yes	☐ No	☐ Not Applicable
If Yes, Please Explain A State drainage permit			
Have You Been Approved For Any State Permits?	☐ Yes	☒ No	☐ Not Applicable
If Yes, Please Explain Currently a Drainage permit is being processed			
Have You Applied For Any Local Permits?	☒ Yes	☐ No	☐ Not Applicable
If Yes, Please Explain Drainage permit			
Have You Been Approved For Any Local Permits?	☒ Yes	☐ No	☐ Not Applicable
If Yes, Please Explain			

Briefly Explain The Level Of Review The Project Or Program Has Undergone

The project has been evaluated by the Water Resource District and final plans and specifications have been prepared by an engineer. An assessment district has been approved.

Do You Expect Any Obstacles To Implementation (i.e., problems with land acquisition, permits, funding, local, opposition, environmental concerns, etc.)?

Funding Timeline (carefully consider when SWC cost-share will be needed)

Source	Total Cost	2015-2017 7/1/15-6/30/17	2017-2019 7/1/17-6/30/19	Beyond 7/1/19
Federal	$	$	$	$
State Water Commission	$ 85,011.00	$	$ 85,011.00	$
Other State	$	$	$	$
Local	$ 245,477.00	$	$ 245,477.00	$
Total	$ 330,488.00	$ 0.00	$ 330,488.00	$ 0.00

List All Other State Of North Dakota Funding Sources (Grant or Loan), For Which You Have Applied

An assessment district has been formed and the assessments approved.

Please Explain Implementation Timelines, Considering All Phases And Their Current Status

The District plans to award a construction contract in the spring of 2017 with construction in the fall of 2017.

Have Assessment Districts Been Formed? ☒ Yes ☐ No ☐ Ongoing ☐ Not Applicable

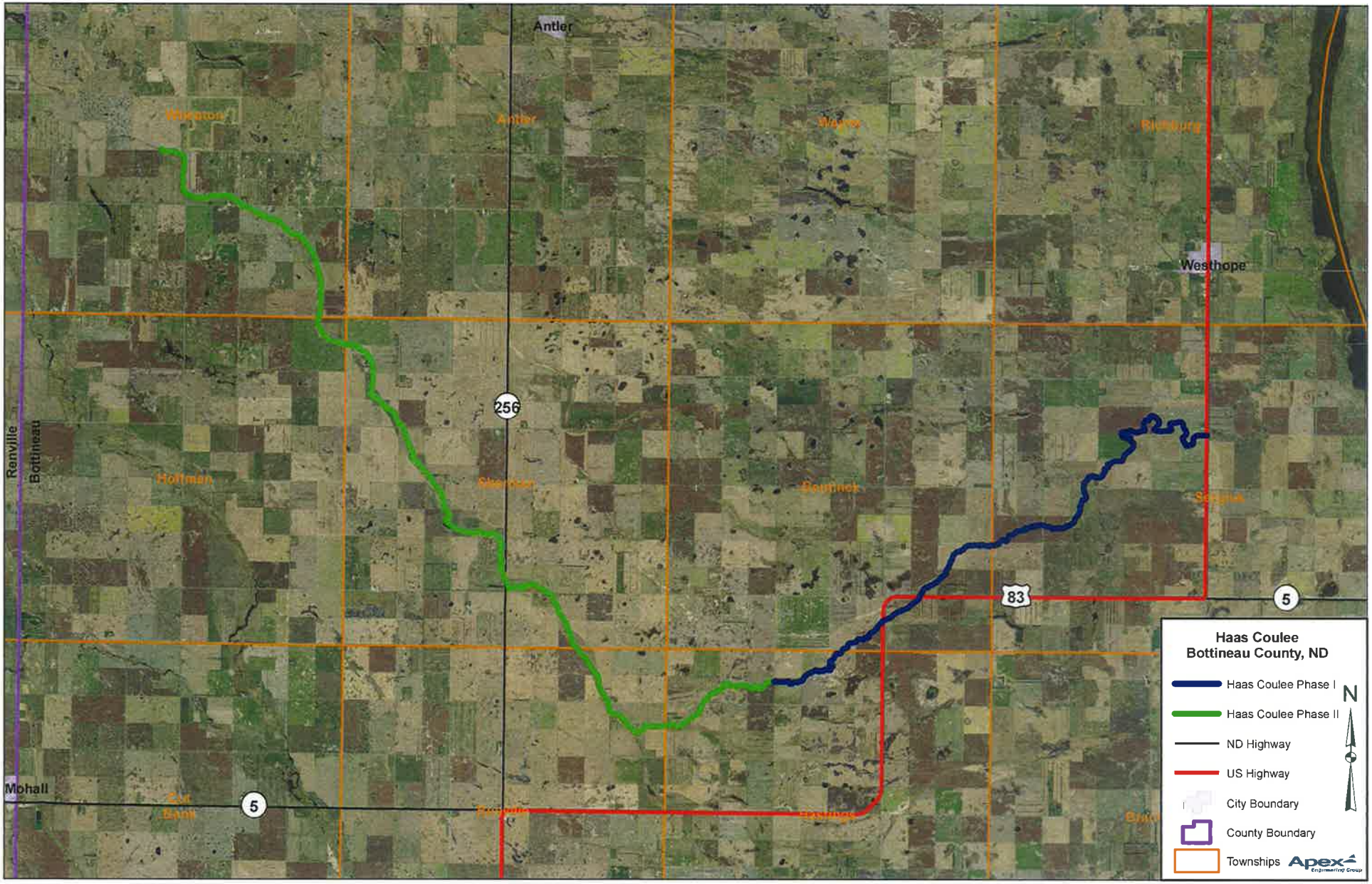
Submitted By Bottineau County Water Resource District			Date January 27, 2017
Address 411 Sinclair St	City Bottineau	State ND	ZIP Code 58318
Telephone Number 701.263.1999			

I Certify That, To The Best Of My Knowledge, The Provided Information Is True And Accurate.

Signature Clifford Issendorf by Jenifer Mallay	Date 5/23/2017

MAIL TO:

ND State Water Commission • ATTN: Cost-Share Program
900 E Boulevard Ave. • Bismarck, ND 58505-0850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Maxbass
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Renville
Bottineau
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Bottineau
Sergius
83
5
Mohall
Lake
Bantry
Haas Coulee
Bottineau County, ND
Haas Coulee Phase I
Haas Coulee Phase II
ND Highway
US Highway
City Boundary
County Boundary
Townships
N
Apex Engineering Group

Apex Engineering Group

CONSTRUCTION COST

Project: **Haas Coulee Phase II**
Crossing with Channel Improv.
Location: Bottineau County, North Dakota
Date Prep: May 18, 2017
Project No. R16.137.0040 Estimator: JRM

Basis for Estimate
No Design Completed
Preliminary Design
X Final Design
Checked By:

Sheet 1 of 1

#	Description	Quantity	Units	Unit Cost	Total Cost	Quantity Cost-Share Eligible	Total Cost Cost-Share Eligible
1	Bond	1	L.S.	$ 3,000.00	$ 3,000.00		$ -
2	Mobilization	1	L.S.	$ 2,000.00	$ 2,000.00	0.5	$ 1,000.00
3	Removal of Pipe	359	L.F.	$ 10.00	$ 3,590.00	116	$ 1,160.00
4	Culverts - New						
	48" Round CSP	170	L.F.	$ 80.00	$ 13,600.00		$ -
	44" x 27" Arch RCP	100	L.F.	$ 198.00	$ 19,800.00		$ -
	57" x 38" Arch CSP	420	L.F.	$ 82.00	$ 34,440.00	180	$ 14,760.00
	64" x 43" Arch CSP	620	L.F.	$ 88.00	$ 54,560.00	240	$ 21,120.00
	71" x 47" Arch CSP	60	L.F.	$ 95.00	$ 5,700.00		$ -
5	Culverts - Remove & Reset						
	57" x 38" Arch CSP	40	L.F.	$ 50.00	$ 2,000.00	40	$ 2,000.00
6	Class 5 Gravel	378	Tons	$ 9.00	$ 3,402.00	37	$ 333.00
7	Trail Crossing Removal	3	Ea.	$ 500.00	$ 1,500.00		$ -
8	Stock Dam Removal	1	Ea.	$ 1,000.00	$ 1,000.00		$ -
9	Coffer Dams at Crossing	3	Ea.	$ 1,000.00	$ 3,000.00	2	$ 2,000.00
10	Stripping	16000	C.Y.	$ 1.00	$ 16,000.00	16000	$ 16,000.00
11	Channel Excavation	29700	C.Y.	$ 2.00	$ 59,400.00	29700	$ 59,400.00
12	Spoil Leveling	29700	C.Y.	$ 1.00	$ 29,700.00	29700	$ 29,700.00
13	Seeding	26	Ac.	$ 700.00	$ 18,200.00	24	$ 16,800.00
				Total Estimated Construction Cost	**$270,892**		**$164,273**
				Construction Administration	$32,507		$24,641
				Administration & Legal - 10%	$27,089		
				Total Estimated Cost	**$330,488**		**$188,914**
						Total Estimated SWC Cost-Share	**$85,011**

	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
NAVD 88	ND	16.137.0040	A	1

CONSTRUCTION PLANS FOR HAAS COULEE LEGAL DRAIN PHASE II IMPROVEMENTS

PROJECT LOCATION

NORTH DAKOTA
STATE LOCATION MAP

TABLE OF CONTENTS:

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BOTTINEAU COUNTY WATER RESOURCE DISTRICT

Apex Engineering Group, Inc.
Bismarck - Fargo, North Dakota
600 South 2nd Street, Suite # 145
Bismarck, North Dakota 58504
Office: 701-323-3950
Fax: 701-323-3951
www.apexenggroup.com

Apex Engineering Group

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
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Estimates of Quantities

Haas Coulee Phase II		
DESCRIPTION	UNITS	QUANTITY
Bond	L.S.	1
Mobilization	L.S.	1
Removal of Pipe	L.F.	359
Culverts - New		
48" Round CSP	L.F.	170
44" x 27" Arch RCP	L.F.	100
57" x 38" Arch CSP	L.F.	420
64" x 43" Arch CSP	L.F.	620
71" x 47" Arch CSP	L.F.	60
Culverts - Remove & Reset		
57" x 38" Arch CSP	L.F.	40
Class 5 Gravel	Tons	378
Trail Crossing Removal	Ea.	3
Stock Dam Removal	Ea.	1
Coffer Dams at Crossing	Ea.	3
Stripping	C.Y.	16,000
Channel Excavation	C.Y.	29,700
Spoil Leveling	C.Y.	29,700
Seeding	Ac.	26

Basis of Estimate	
ITEM	BASIS
Class 5 Gravel	1.875 TON / CY

Note:
Class 5 gravel bid item includes salvaging and respreading existing gravel and hauling and placing additional gravel as shown in the plans.

Seeding Mixture	
SEED	# PER ACRE
Pubescent Wheatgrass	15
Intermediate Wheatgrass	15
Total	30

General Notes:
1. Drainage swales to be placed in the spoil areas as staked in the field.
2. Pick all rock from spoil areas. The contractor is responsible for the disposal of the rock.
3. All corrugated steel pipe shall be 14 gage and zinc coated per AASHTO M36.
4. Four (4) inches of Class 5 gravel to be replaced at each roadway culvert installation and grade raise The contractor shall be paid for actual quantity.
5. It shall be the contractors responsibility to obtain roadway crossing permit from Bottineau County Highway Department for all work on County roadways.

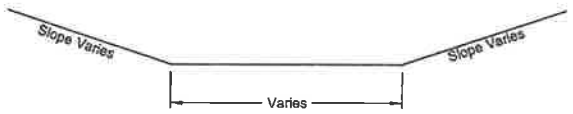
Utilities:
Utility facilities shown on the Plans, if any, are for reference purposes only and may not constitute and exhaustive representation of all utility facilities within the project. Notify the North Dakota One Call System (811) before starting the work, so they may locate and mark all utility facilities within the project.

Comply with Chapter 49-23 of the NDCC in determining the location of underground utilities.

Locate publicly-owned and privately-owned utility facilities (oil pipeline companies), whether on or off the One Call System.

Contact Minot Air Force Base for locations of missle control cables.

Elevations:
All elevations are in NAVD 88.



Channel Cleaning Typical Cross Section
Locations as shown on plans
Sta 0+00 to 145+60

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Quantities / Notes

Haas Coulee Phase II

Bottineau County Water Resource District

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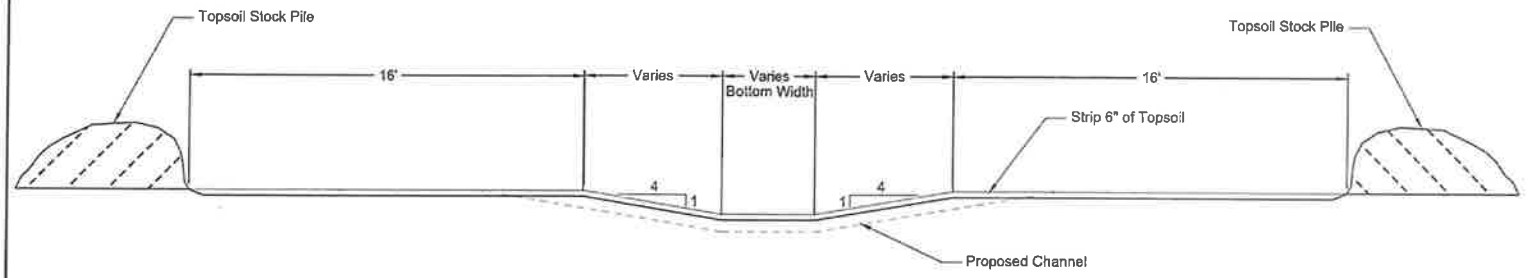

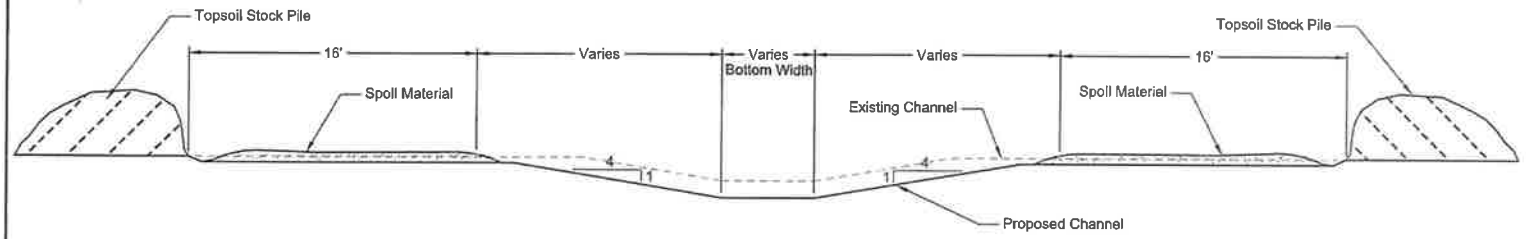

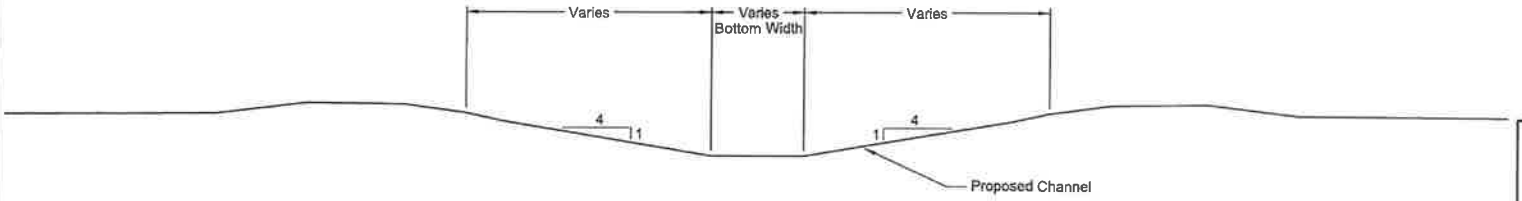

Notes:
1. Strip topsoil to a depth of 6".
2. Blade topsoil back over channel spoil.
3. Leave drainage swale in spoil area as staked in the field.
4. Seed channel bottom and side slopes.
5. Seed spoil areas and drainage swales.

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Typical Spoil Disposal Area

Haas Coulee Phase II

Bottineau County Water Resource District

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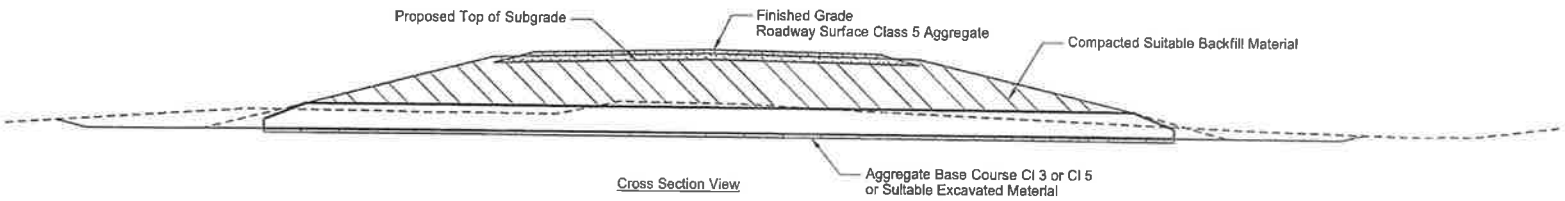
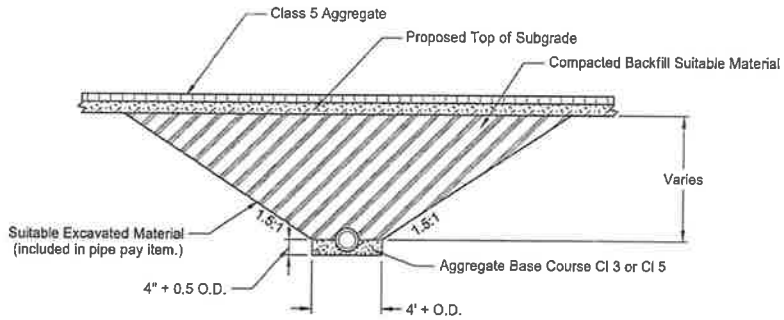
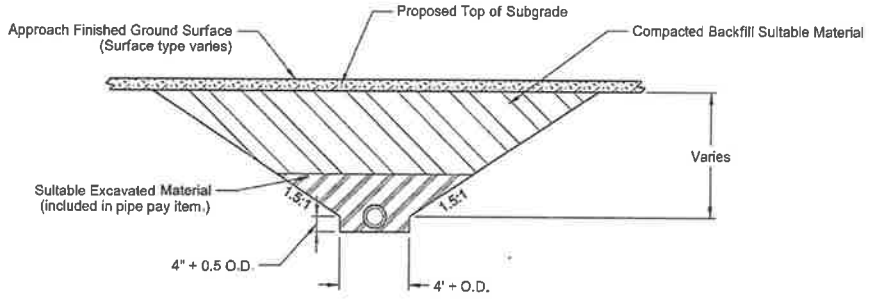


Cross Section View



Backfill Detail - Pipe Conduit Roadway



Backfill Detail - Pipe Conduit Approach

Included in Pipe Pay Item

1) Pipe
2) Trench excavation
3) Disposal of unsuitable excavated material and placement of suitable excavated material on inslope
4) Backfill of suitable excavated material
5) Aggregate Base Course Cl 3 or Cl 5 (Pipe Bedding)

Pay Items

1) Pipe Conduit
2) Pipe Conduit-Approach
3) Aggregate Cl 5 (Roadway Surface)

NOTES:

1) This drawing is for roadway and approach pipes.
2) Compaction requirements for all materials associated with the trench installation shall meet 90% of AASHTO T-180. Maximum thickness of any one lift shall not exceed 6 inches.

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Culvert Backfill Detail

Haas Coulee Phase II

Bottineau County Water Resource District

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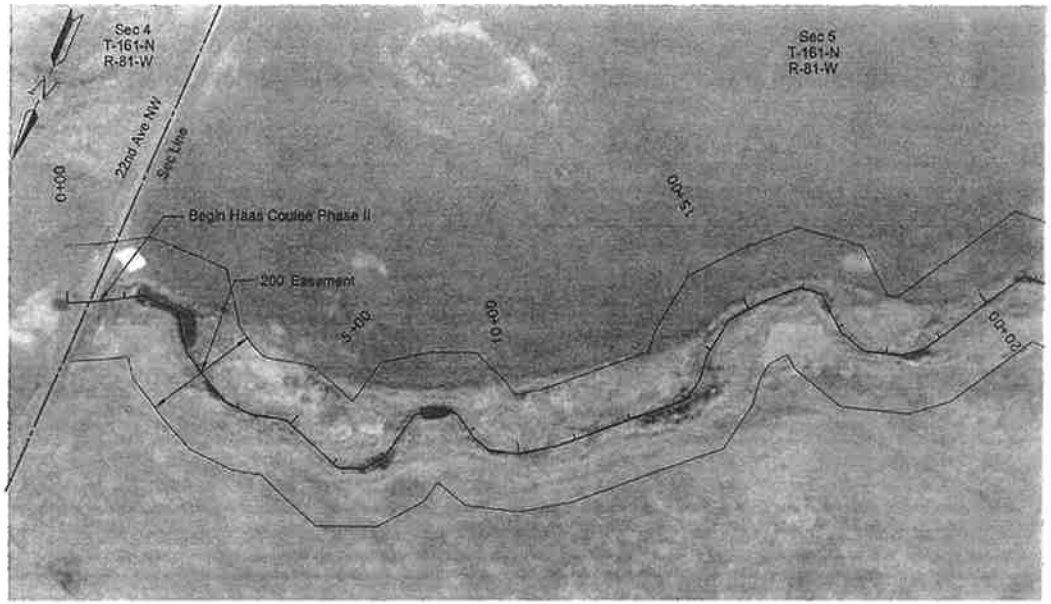

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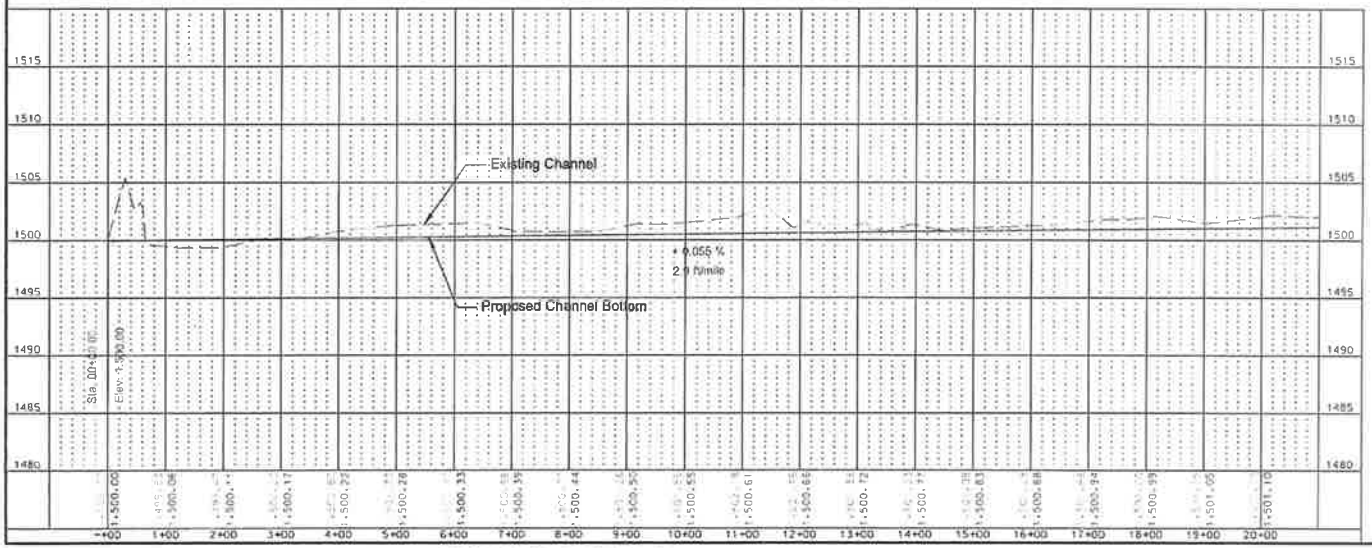

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Plan & Profile
Sta. 00+00 to Sta. 20+00

Haas Coulee Phase II

Bottineau County Water Resource District

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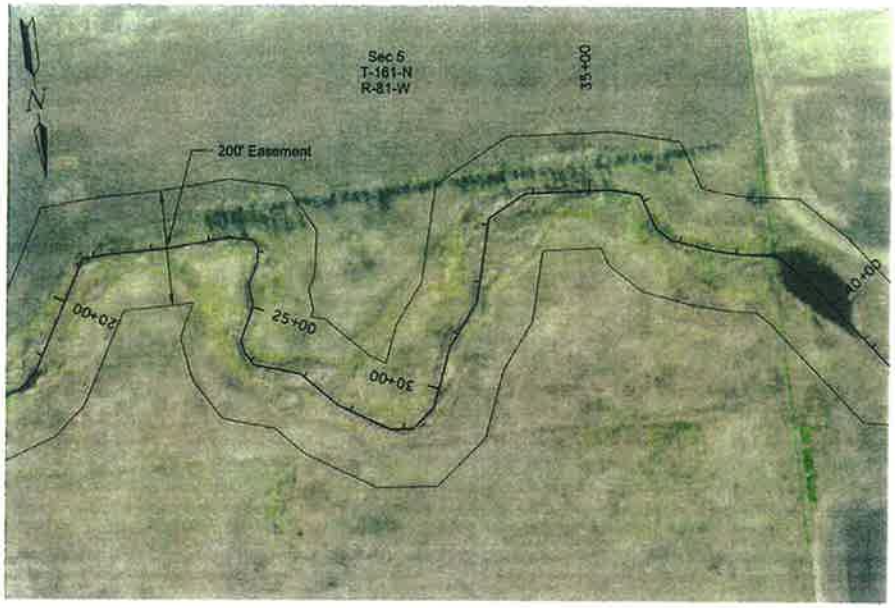

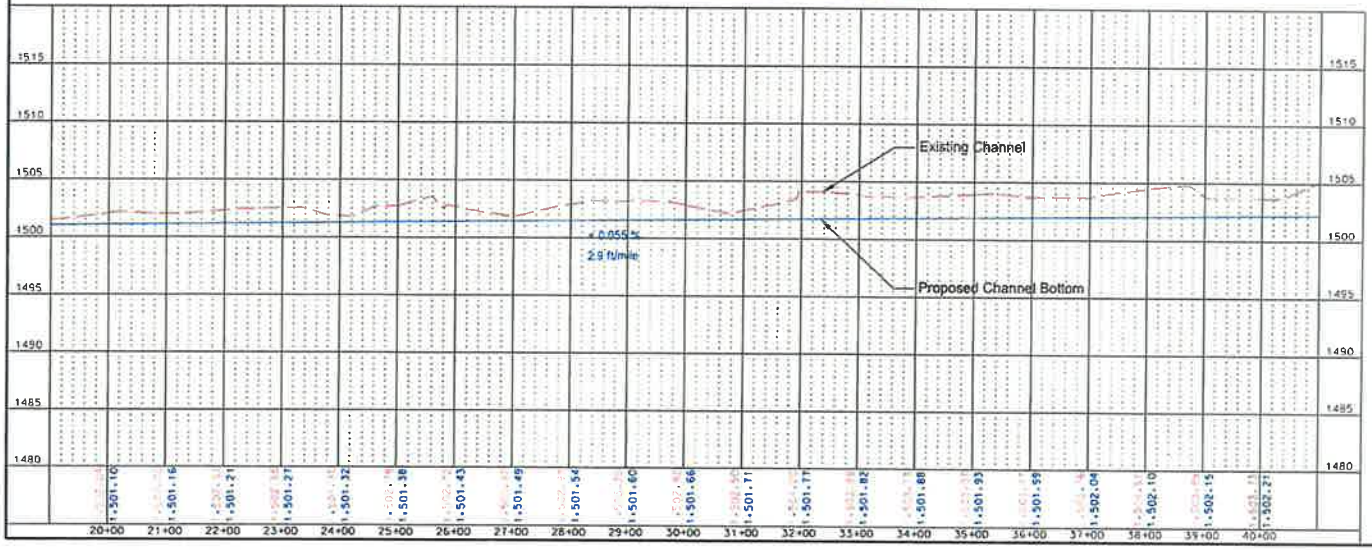

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Plan & Profile
Sta. 20+00 to Sta. 40+00

Haas Coulee Phase II

Bottineau County Water Resource District

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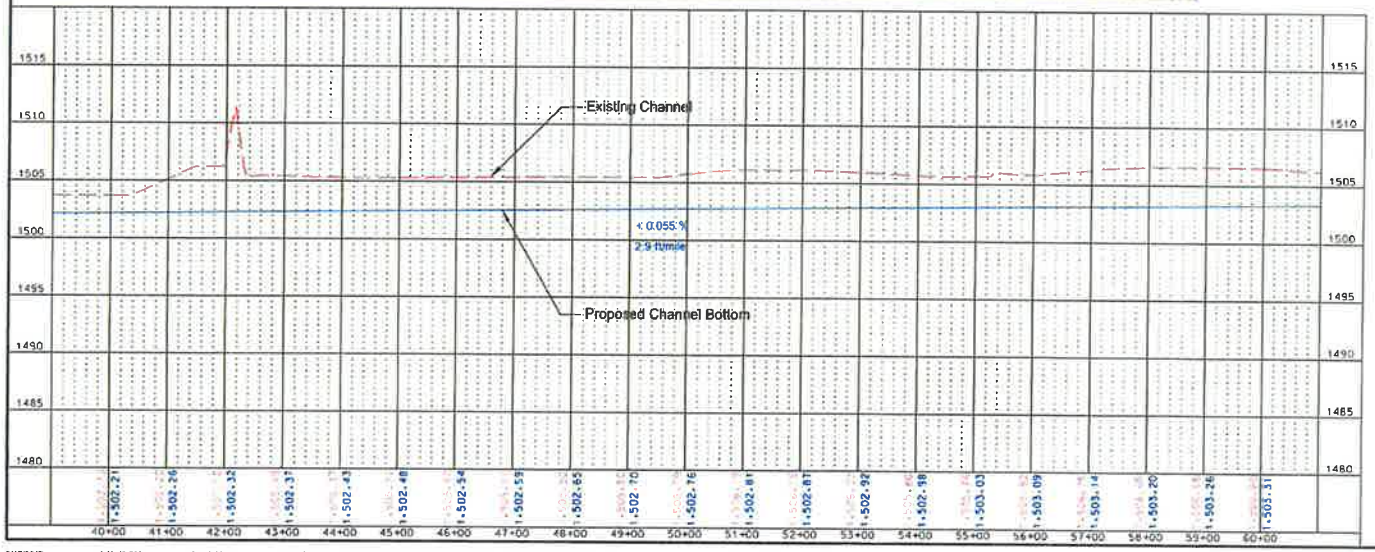

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Plan & Profile
Sta. 40+00 to Sta. 60+00

Haas Coulee Phase II

Bottineau County Water Resource District

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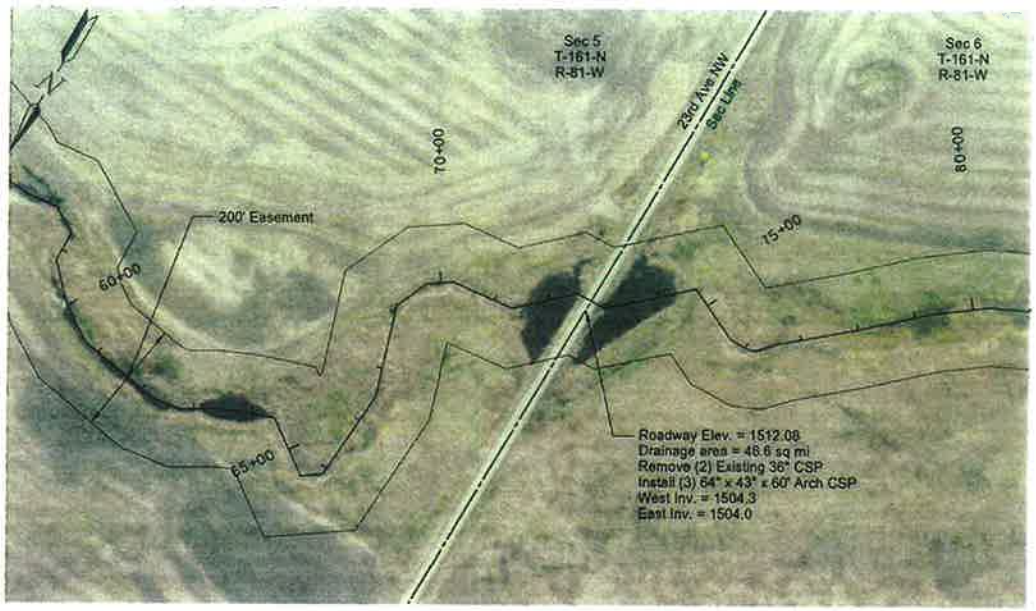

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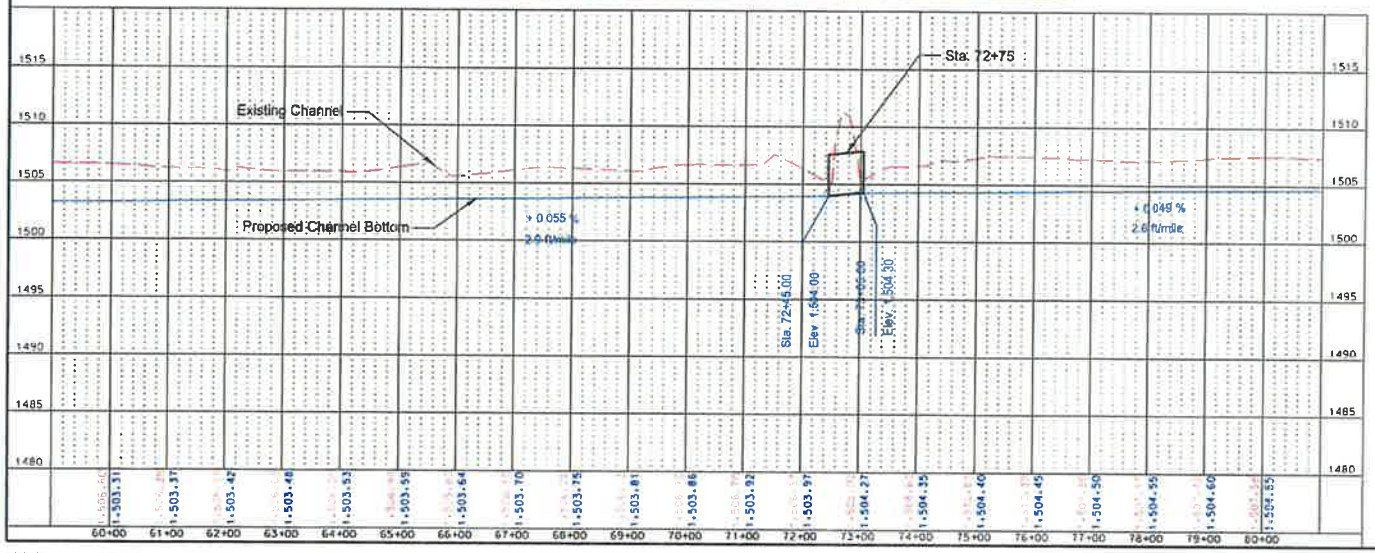

Plan & Profile
Sta. 60+00 to Sta. 80+00

Haas Coulee Phase II

Bottineau County Water Resource District

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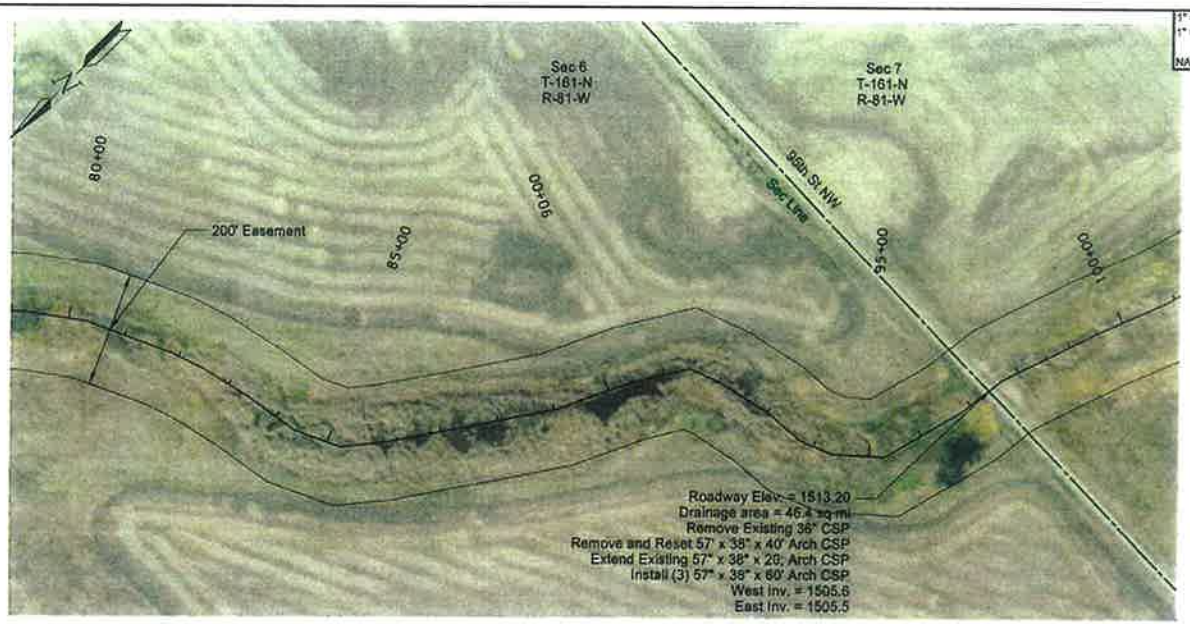

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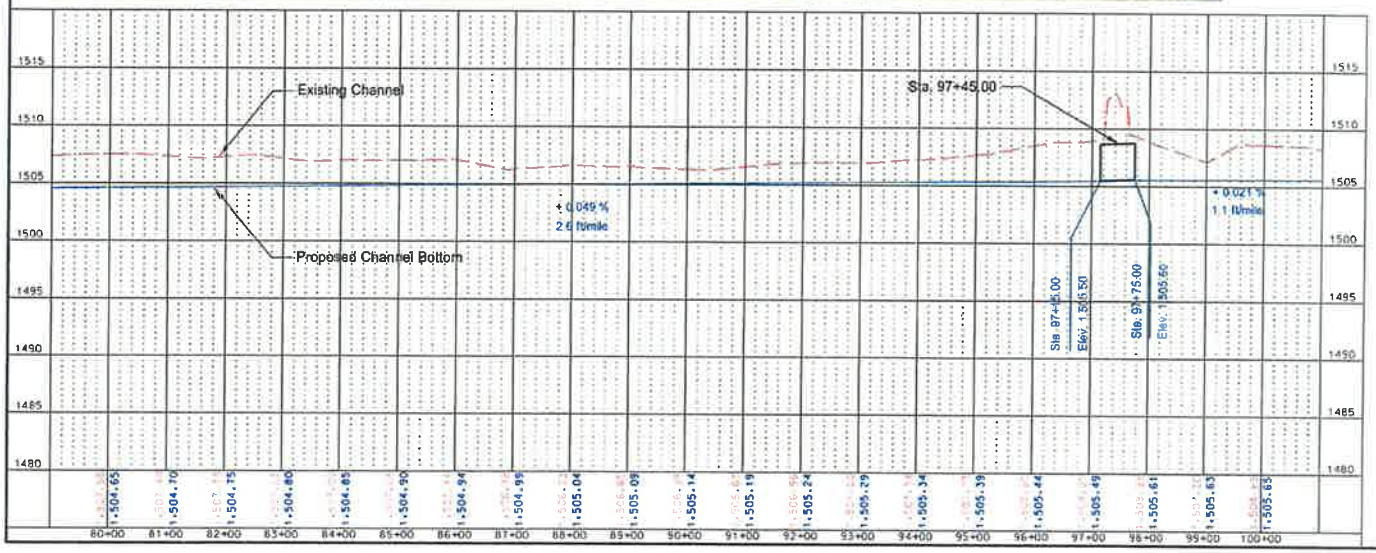

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Plan & Profile
Sta. 80+00 to Sta. 100+00

Haas Coulee Phase II

Bottineau County Water Resource District

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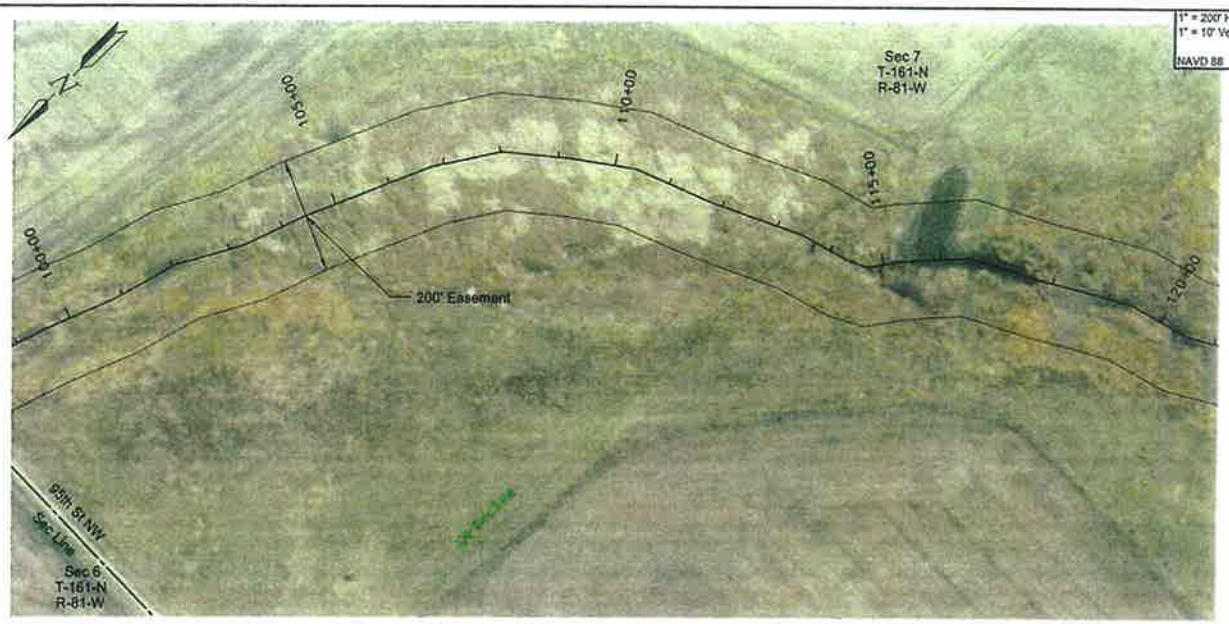

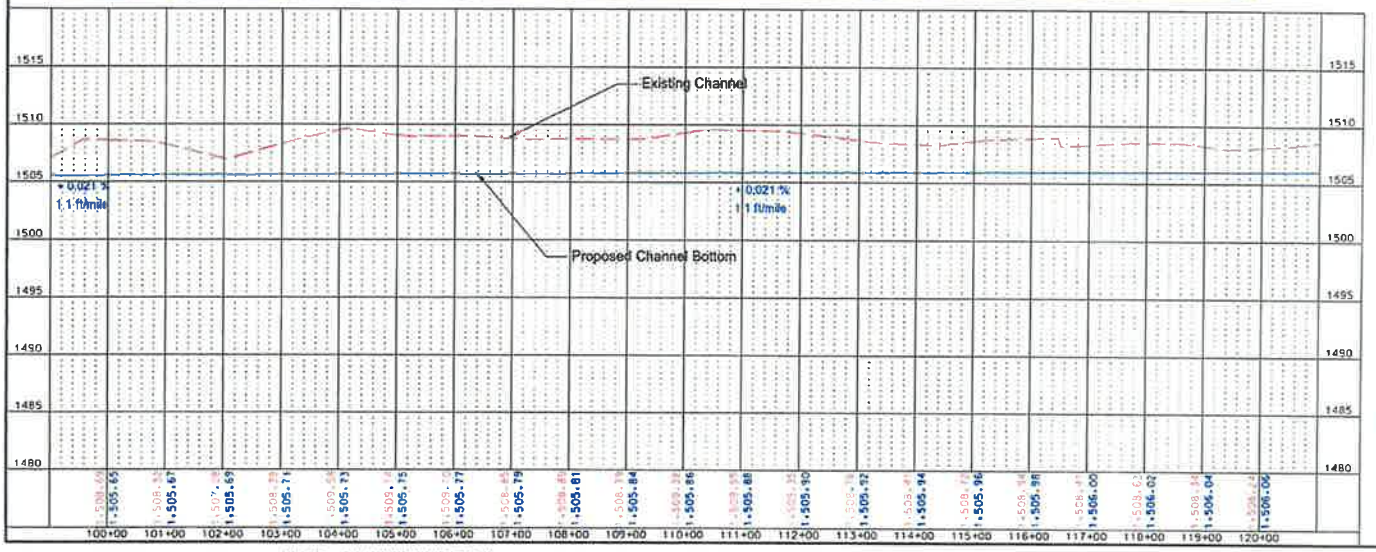

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Plan & Profile
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Haas Coulee Phase II

Bottineau County Water Resource District

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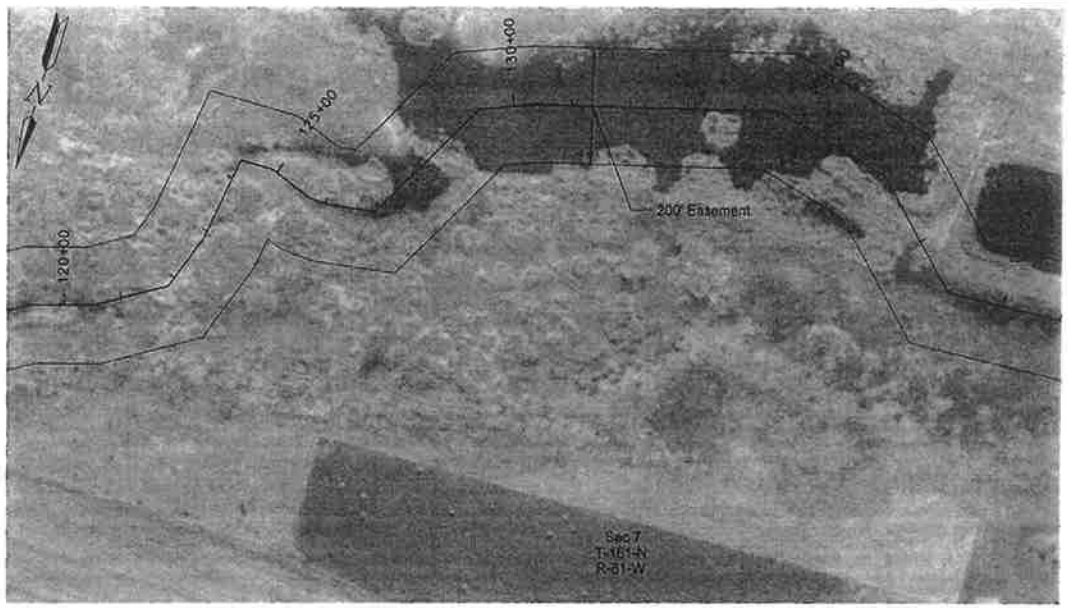
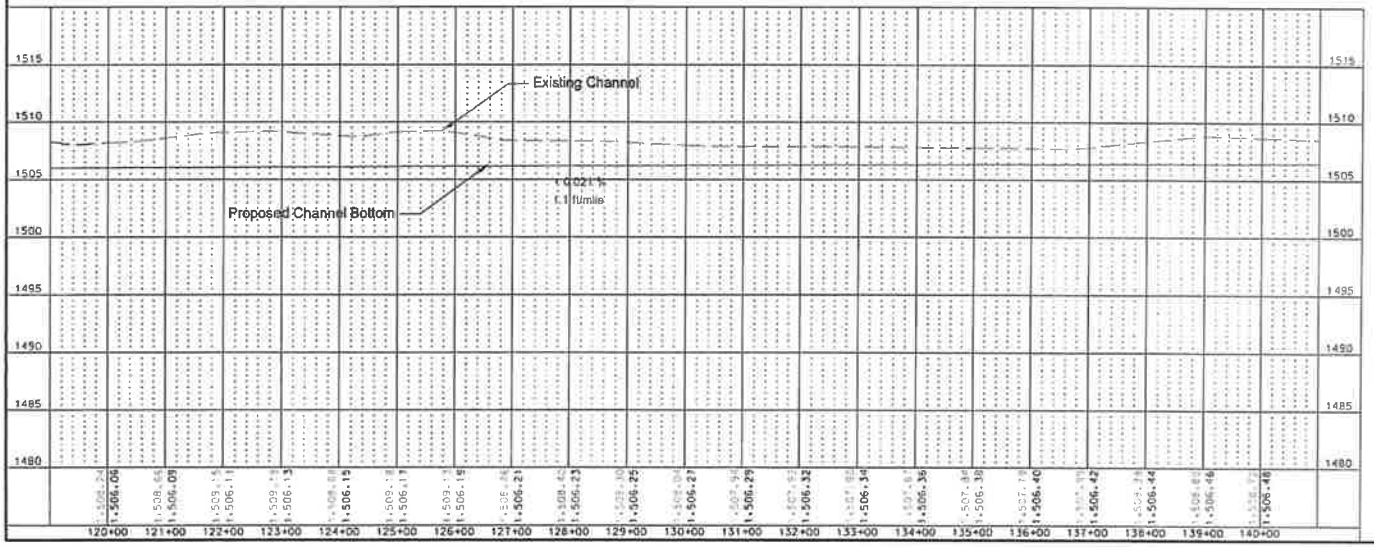
	ND	16.137.0040	B	7





This document was originally issued and sealed by Stephen M. Hoetzer, Registration Number PE- 2325, on 02/15/17 and the original document is stored at the office of Apex Engineering Group, Inc., Bismarck, ND

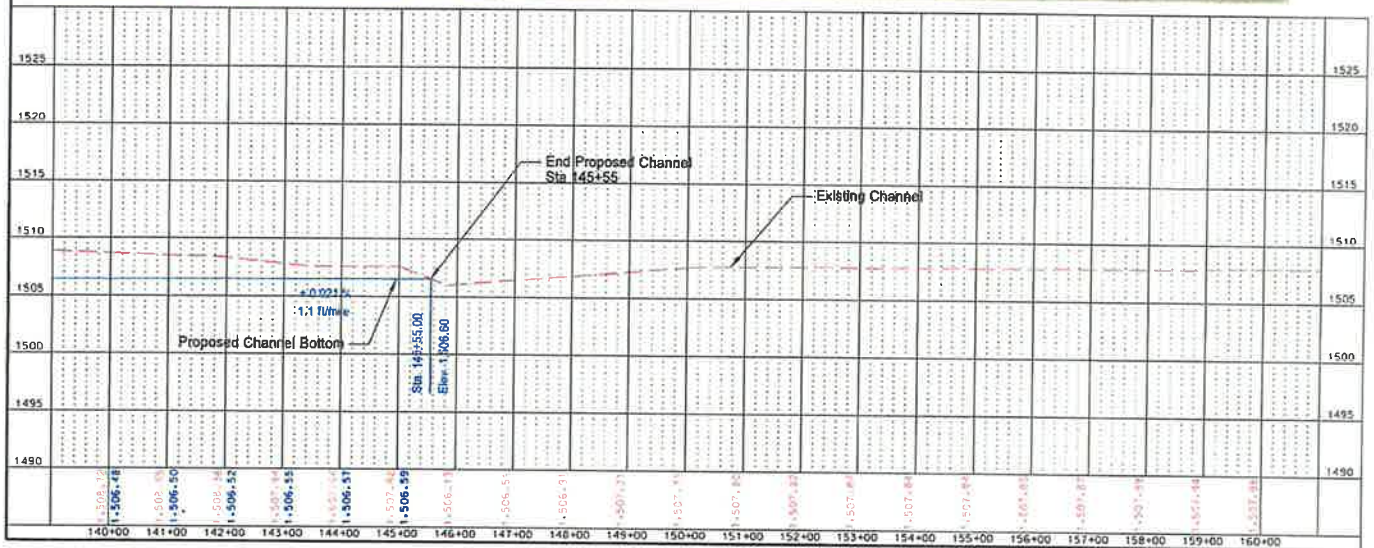
Plan & Profile
Sta. 120+00 to Sta. 140+00

Haas Coulee Phase II

Bottineau County Water Resource District

2/15/2017 4:19:53 PM Sarah.Mohl Y:\bis-fs2\Shares\Projects\2016\16.137.0040 BCWRD - Haas Coulee Phase 2\Water\Design\Drawings\Plan Sheets\Plan&Profile Sheets\060PP_7.dgn

1" = 200' Horz 1" = 10' Vert NAVD 88	STATE	PROJECT NO	SECTION NO.	SHEET NO
	ND	16.137.0040	B	8



This document was originally issued and sealed by Stephen M. Hoetzer, Registration Number PE- 2325, on 02/15/17 and the original document is stored at the office of Apex Engineering Group, Inc., Bismarck, ND

Plan & Profile
Sta. 140+00 to Sta. 160+00

Haas Coulee Phase II

Bottineau County Water Resource District

2/15/2017 4:19:56 PM Sarah.Mohl \\bis-fs2\Shared\Projects\2016\16.137.0040 BCWRD - Haas Coulee Phase 2\Water\Design\Drawings\Plan Sheets\Plan&Profile Sheets\060PP_8.dgn

North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
(701) 328-2750 • TTY 1-800-366-6888 • FAX (701) 328-3696 • http://swc.nd.gov

Agenda F 3)

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer/Secretary
SUBJECT: NDSWC Cost-Share Request – McHenry County Water Resource District
Buffalo Lodge Lake Outlet
DATE: May 31, 2017

In their correspondence dated May 5, 2017, the McHenry County Water Resource District requested cost share assistance for their Buffalo Lodge Lake Outlet.

The project is located in Egg Creek Township in McHenry County. Buffalo Lodge Lake is a recreation resource for McHenry County which includes a county park, picnic shelters, camping area, and fishing pier as well as a few dozen seasonal homes located on its shores. The existing outlet structure is an undersized 10-foot long timber bridge with timber stop-logs installed at the inlet of the bridge. The outlet structure is located on a township road and acts as an access bridge to pasture land. The proposed outlet structure will provide an outlet for Buffalo Lodge Lake, capable of passing the 100-year event without endangering the seasonal homes that are located adjacent to the lake. Both construction permit and water use permit applications have been filed.

The estimated total cost of the Buffalo Lodge Lake Outlet is $337,288, which is eligible for state cost-share assistance at 40 percent for total cost share amount of $134,915 in state funds.

I recommend the State Water Commission approve this request by the McHenry County Water Resource District for state cost participation in the Buffalo Lodge Lake Outlet at an amount not to exceed $134,915. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits and the availability of funds.

GE:bn/0551

ACKERMAN ESTVOLD

1907 17th Street Southeast
Minot, ND 58701
701.837.8737
www.ackerman-estvold.com

May 5, 2016

North Dakota State Water Commission
ATTN: Cost Share Program
900 East Boulevard
Bismarck, ND 58505-0850

Re: Revision to Cost Share Application
Buffalo Lodge Lake Outlet
McHenry County, North Dakota

Dear Sir/Madam:

As you may be aware, the McHenry County Water Resource District (MCWRD) has designed a replacement outlet structure for Buffalo Lodge Lake near Granville, ND. The purpose if the project is to replace an aging timber structure.

On behalf of the MCWRD, Ackerman-Estvold submitted a Cost Share Request on February 8, 2016. A Construction Permit was also submitted to the SWC Regulatory division. On May 9, 2016, the MCWRD received a letter from the stating that the Construction Application was incomplete because, in accordance with North Dakota Administrative Code 89-02-02-02, a completed construction permit must include evidence establishing a property right for the property that will be affected by the construction.

The replacement outlet structure will be constructed on property owned by the McHenry County Parks. Also attached is a letter from the McHenry County State's Attorney which concludes that McHenry County has established property rights in those properties that will be affected by the construction of a new water outlet at Buffalo Lodge Lake by prescriptive easement.

Based on review of a draft of this attached letter, State Water Commission staff stated that the Office of the State Engineer would accept evidence of a property right through prescription, if the dam embankment is not raised above elevation 1483.5 and the structure would not restrict discharges below the discharge rating curve of the existing 36-inch CMP primary outlet. A revised construction permit will be submitted shortly.

Attached supporting information includes:

- Revised cost share application
- Location map
- Outlet Alternatives Study Dated February 8, 2016. Appendix E includes Engineers Estimate of Probable Costs.
- Letter from McHenry County State's Attorney stating establishing prescriptive property rights surrounding Buffalo Lodge Lake.

The MCWRD plans to construct this outlet in the fall of 2017, since at that time of the year lake levels are usually lower and there will likely be limited / no outflow from the lake. Please consider this need when reviewing this cost share request.

If you have questions or require additional information, please contact me at 701-857-9142 or by e-mail at thomas.johnson@ackerman-estvold.com.

Sincerely,

Thomas R. Johnson, PE, C.F.M.
Ackerman-Estvold

COST-SHARE REQUEST FORM

NORTH DAKOTA STATE WATER COMMISSION
DEVELOPMENT DIVISION
SFN 60439 (3/2017)

This form is to be filled out by the project or program sponsor with State Water Commission staff assistance as needed. Applications for cost-share are accepted at any time. However, applications received less than 30 days before a State Water Commission meeting will be held for consideration at the next scheduled meeting.

Please answer the following questions as completely as possible. Supporting documents such as maps, detailed cost estimates, and engineering reports should be attached to this form. If additional space is required, please use extra sheets as necessary.

For information regarding cost-share program eligibility see the *State Water Commission Cost-Share Policy, Procedure, and General Requirements* – available upon request or at www.swc.nd.gov.

Project, Program, Or Study Name
Buffalo Lodge Lake Outlet

Sponsor(s)
McHenry County Water Resource District

County	City	Township/Range/Section
McHenry	Egg Creek Township	T156N / R79W/ Section 13

Description Of Request ☐ New ☑ Updated (previously submitted)

Specific Needs Addressed By The Project, Program, Or Study
Construction of a resilient outflow structure that will stabilize Buffalo Lodge Lake outflow and lake elevation

If Study, What Type ☐ Water Supply ☐ Hydrologic ☐ Floodplain Mgmt. ☐ Feasibility ☑ Other

If Project/Program

☐ Flood Control	☐ Multi-Purpose	☐ Bank Stabilization	☐ Dam Safety/EAP
☑ Recreation	☐ Water Supply	☐ Snagging & Clearing	☐ Property Acquisition
☐ Irrigation	☑ Water Retention	☐ Rural Flood Control	☐ Other

Jurisdictions/Stakeholders Involved
McHenry County Water Resource District
Egg Creek Township
Private property owners including ranchers with pastures adjacent to and downstream of the lake and lake

Description Of Problem Or Need And How Project Addresses That Problem Or Need

The existing outlet structure is an undersized 10-foot long timber bridge with timber stop-logs installed at the inlet of the bridge. The outlet structure is located on a township road and acts as an access bridge to pasture land.

Buffalo Lodge Lake is a recreation resource for McHenry County. Buffalo Lodge Lake has a county park with picnic shelters, picnic tables, camping area and fishing pier as well as a few dozen seasonal homes are located on its shores. Buffalo Lodge Lake has been stocked with game fish by the North Dakota Game and Fish Department.

The proposed outlet structure will provide a resilient outlet for Buffalo Lodge Lake, capable of passing the 100-year event without endangering the seasonal homes that are located adjacent to the lake.

Has Feasibility Study Been Completed?	☑ Yes	☐ No	☐ Ongoing	☐ Not Applicable
Has Engineering Design Been Completed?	☑ Yes	☐ No	☐ Ongoing	☐ Not Applicable
Have Land Or Easements Been Acquired?	☑ Yes	☐ No	☐ Ongoing	☐ Not Applicable

Note: Easement by Prescription, See Attached

Have You Applied For Any State Permits?	☑ Yes	☐ No	☐ Not Applicable
If Yes, Please Explain SFN51695 Construct or Modify A Dam, Dike, Ring Dike or Other Water Resource Facility			
Have You Been Approved For Any State Permits?	☐ Yes	☑ No	☐ Not Applicable
If Yes, Please Explain			
Have You Applied For Any Local Permits?	☐ Yes	☐ No	☑ Not Applicable
If Yes, Please Explain			
Have You Been Approved For Any Local Permits?	☐ Yes	☐ No	☑ Not Applicable
If Yes, Please Explain			

Briefly Explain The Level Of Review The Project Or Program Has Undergone

Internal engineering review, review by McHenry Water Resource District Board, Submitted to State Water Commission for construction permit.

Do You Expect Any Obstacles To Implementation (i.e., problems with land acquisition, permits, funding, local, opposition, environmental concerns, etc.)?

Funding Timeline (carefully consider when SWC cost-share will be needed)

Source	Total Cost	2015-2017 7/1/15-6/30/17	2017-2019 7/1/17-6/30/19	Beyond 7/1/19
Federal	$	$	$	$
State Water Commission	$ 134,915.00	$ 134,915.00	$	$
Other State	$	$	$	$
Local	$ 202,372.50	$ 202,372.50	$	$
Total	$ 337,287.50	$ 337,287.50	$ 0	$

List All Other State Of North Dakota Funding Sources (Grant or Loan), For Which You Have Applied

Please Explain Implementation Timelines, Considering All Phases And Their Current Status

Bidding of the project will occur in Spring or early Summer 2017. Construction will occur Fall 2017.

Have Assessment Districts Been Formed?	☐ Yes	☑ No	☐ Ongoing	☐ Not Applicable

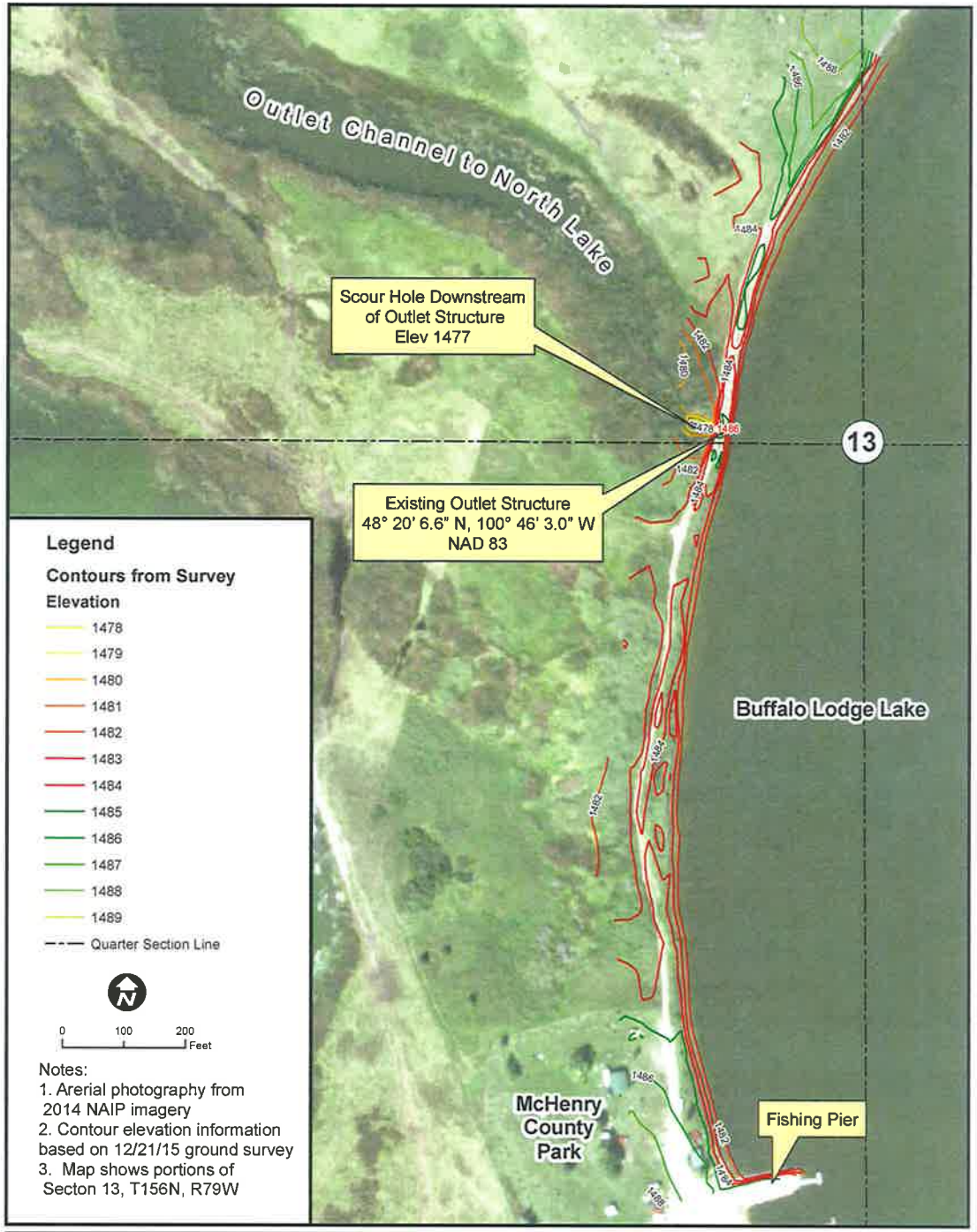
Submitted By McHenry County Water Resource District - Mr. David Ashley, Board Chair			Date
Address PO Box 284	City Towner	State ND	ZIP Code 58788
Telephone Number 701-537-5774			

I Certify That, To The Best Of My Knowledge, The Provided Information Is True And Accurate.

Signature	Date

MAIL TO:

ND State Water Commission • ATTN: Cost-Share Program
900 E Boulevard Ave. • Bismarck, ND 58505-0850



Project Name: Buffalo Lodge Lake	Scale: 1:2400	Drawn By: TJohnson
Project No: R15095	Date: 02/22/2016	Appr By: E Huett

LOCATION MAP
BUFFALO LODGE LAKE OUTLET

FIGURE 1

ENGINEERS OPINION OF PROBABLE COSTS

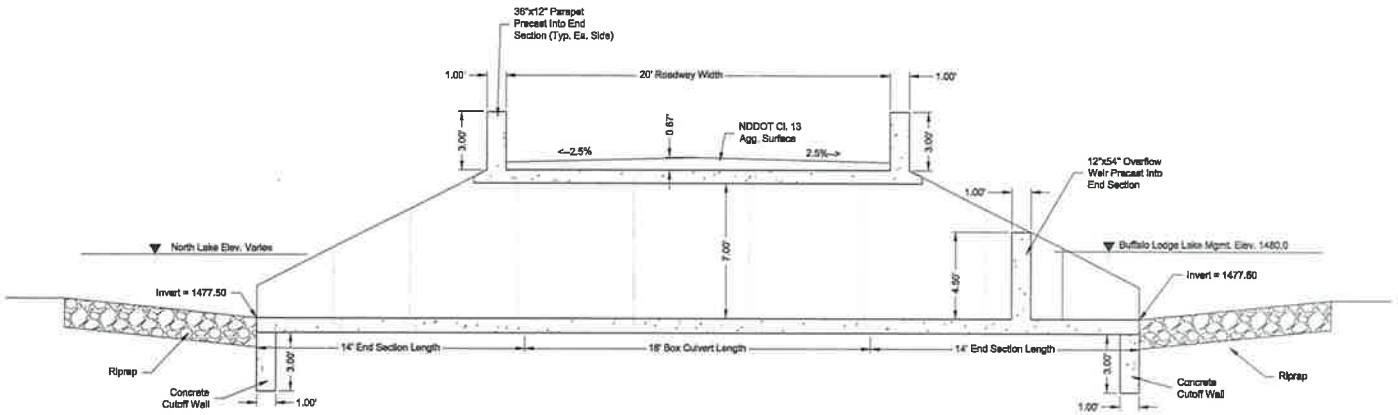
ACKERMAN ESTVOLD

CLIENT	McHenry County Water Resources District	PROJECT NO: AE R15095	PAGE: 1 of 1
PROJECT	Buffalo Lodge Lake Outlet	PREPARED BY: TRJ	FILE NO:
SUBJECT	Estimated Project Costs	CHECKED BY:	DATE: May 31, 2017

Item No.	Description	Quantity	Unit	Unit Price	Subtotal
1	General Conditions (Mobilization, Bonding, Insurance)	1	LS	$ 35,000.00	$ 35,000.00
2	Erosion and Sedimentation Control	1	LS	$ 7,000.00	$ 7,000.00
3	Remove Existing Structure	1	LS	$ 20,000.00	$ 20,000.00
4	Remove Riprap	80	CY	$ 60.00	$ 4,800.00
5	Remove Pipe (All Types and Sizes)	80	LF	$ 50.00	$ 4,000.00
6	Remove Fence	1	LS	$ 500.00	$ 500.00
7	NDDOT Cl. 13 Aggregate	230	TON	$ 50.00	$ 11,500.00
8	Geotextile Fabric - NDDOT Type RR	350	SY	$ 5.00	$ 1,750.00
9	Riprap	350	TON	$ 110.00	$ 38,500.00
10	Double 12' by 7' Box Culvert	18	LF	$ 2,800.00	$ 50,400.00
11	Double 12' by 7' End Section (North Lake)	1	EA	$ 35,000.00	$ 35,000.00
12	Double 12' by 7' End Section (Buffalo Lodge Lake)	1	EA	$ 50,000.00	$ 50,000.00
13	Guardrail	1	LS	$ 17,000.00	$ 17,000.00
14	Fence and Gate	1	LS	$ 3,300.00	$ 3,300.00
	TOTAL CONSTRUCTION				**$ 278,750.00**

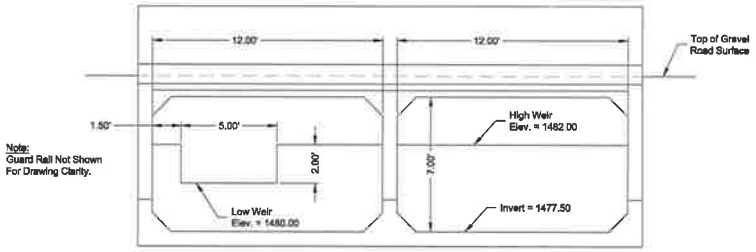
	Contingency (10%)				$ 27,875.00
	Construction Engineering (11%)				$ 30,662.50
	TOTAL PROJECT COSTS				**$ 337,287.50**

Since the Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, this Opinion of Probable Cost is made on the basis of Engineer's experience and qualifications and represent Engineer's best judgment as an experienced and qualified professional engineer, familiar with the construction industry. The Engineer cannot and does not guarantee nor warranty, expressed or implied, that proposals, bid, or actual Construction Costs or Total Project Costs will not vary from the Opinion of Probable Cost shown.



1 / C6 Box Culvert Detail - Profile

Scale: 1" = 6'



Note:
Guard Rail Not Shown For Drawing Clarity.

2 / C6 Box Culvert Detail - Section

Scale: 1" = 6'

PRELIMINARY

NOT FOR CONSTRUCTION

ACKERMAN ESTVOLD
1907 17th Street Southeast · Minot, ND 58701
701.837.8737 · www.ackerman-estvold.com

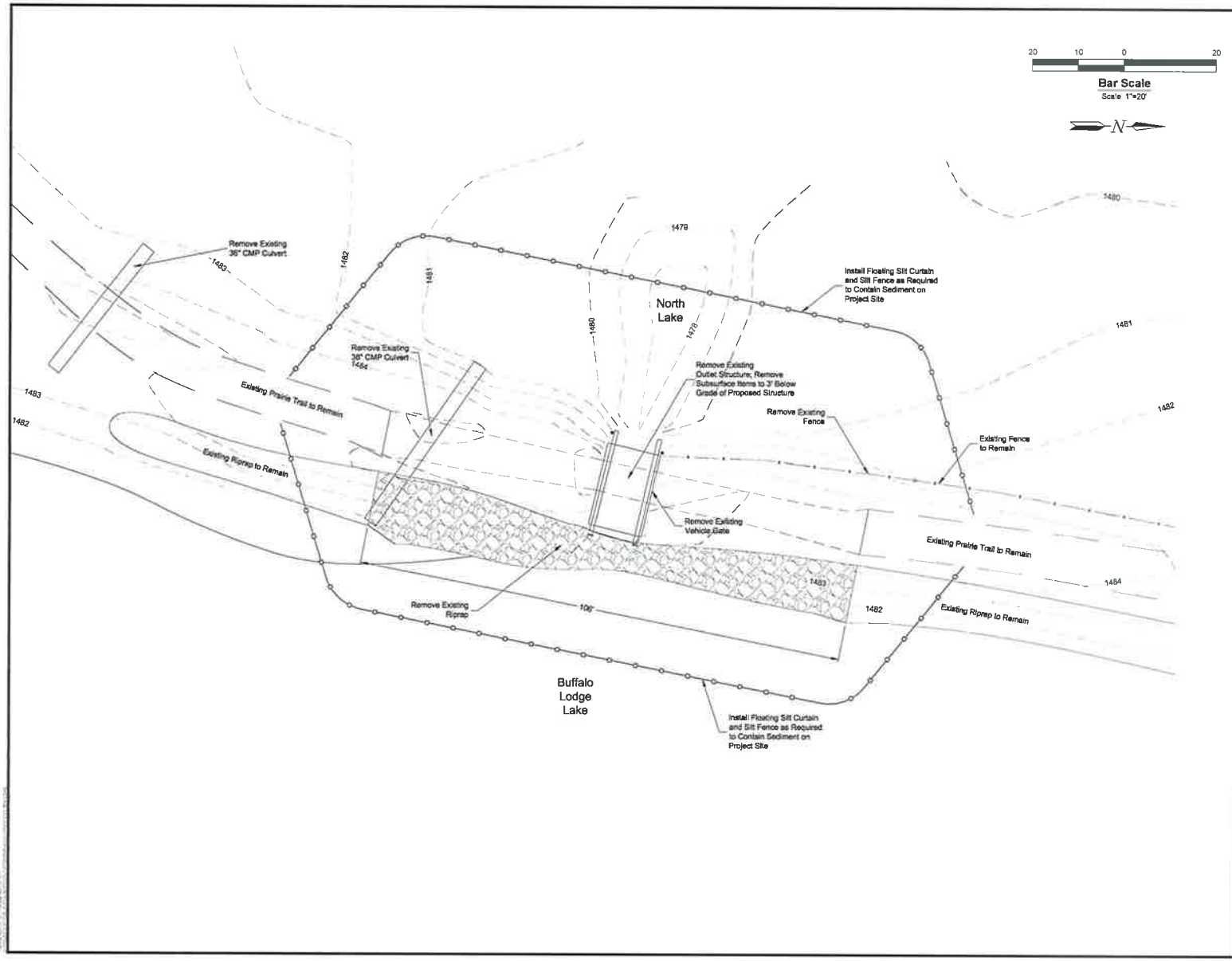
McHenry County Water Resources District
Buffalo Lodge Lake Outlet Replacement

Box Culvert Profile and Section

PROJECT NO 913090

DRAWING NAME C06_CST_BCDetails.dwg

C6 OF 9



PRELIMINARY

NOT FOR CONSTRUCTION

NO. REVISIONS | BY | DATE | APPR.

ACKERMAN ESTVOLD
1907 17th Street Southeast | Minot, ND 58701
701 837 8737 · www.ackerman-estvold.com

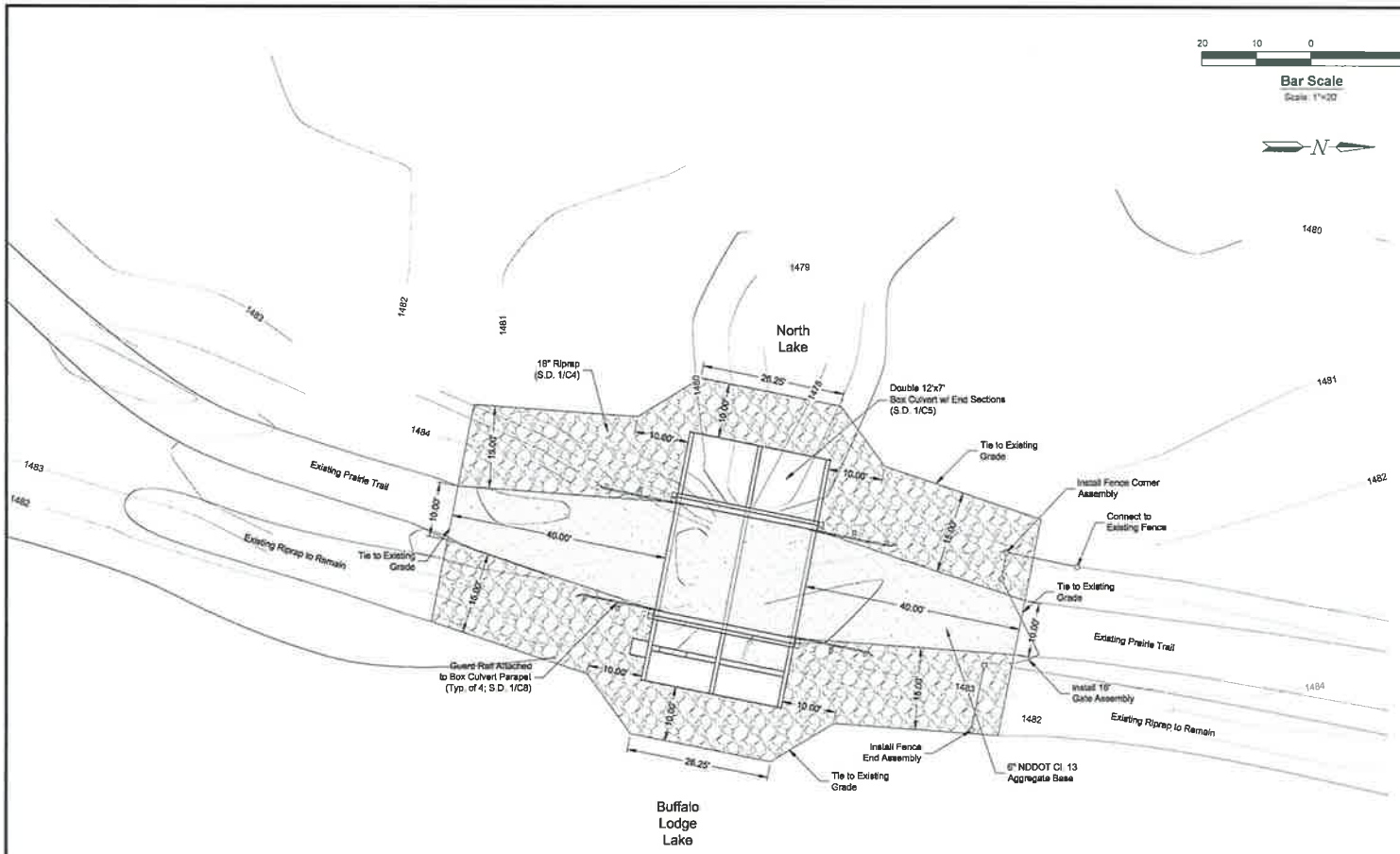
SCALE (H): 1"=20'
SCALE (V): N/A
DRAWN BY: MBA
DESIGNED BY: TRJ
CHECKED BY: MBA
DATE: 2/15/19

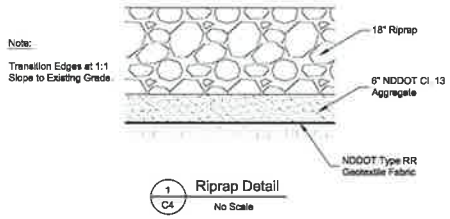
McHenry County Water Resources District
Buffalo Lodge Lake Outlet Replacement

Demolition Plan

PROJECT NO. 615099
DRAWING NAME: C03_Demo.dwg

C3 OF 9





1 / C4 Riprap Detail
No Scale

PRELIMINARY

NOT FOR CONSTRUCTION

NO | REVISIONS | BY | DATE | APPR.

ACKERMAN ESTVOLD
1907 17th Street Southeast · Minot, ND 58701
701.837.8737 · www.ackerman-estvold.com

SCALE IN 1"=20'
SCALE SY: NA
DRAWN BY: RBA
DESIGNED BY: TRJ
CHECKED BY: RBA
DATE: 2/10/19

McHenry County Water Resources District
Buffalo Lodge Lake Outlet Replacement

Site Plan

PROJECT NO
R10005
DRAWING NAME
C04_Site.dwg

C4 OF 9

North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
(701) 328-2750 • TTY 1-800-366-6888 • FAX (701) 328-3696 • http://swc.nd.gov

Agenda F-4)

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer/Secretary
SUBJECT: NDSWC Cost-Share Request – Walsh County Water Resource District
Improvement of Walsh County Drain 22
DATE: May 25, 2017

In their correspondence dated May 10, 2017, the Walsh County Water Resource District requested cost share assistance for their Improvement of Walsh County Drain 22 project.

The project would provide agricultural drainage for approximately 3,606 acres within Walshville Township of Walsh County. Approximately 3.8 miles of drainage ditch would be excavated, along with changes in culvert sizes as needed and outlet improvements. The proposed work involves the construction of three distinct channels: Drain 22, Drain 22A and Drain 22B. The area proposed to be benefitted currently has poor drainage resulting for insufficient channel and culvert capacity. The proposed improvements will include an 8-foot bottom width and 3:1 sideslopes. A drain permit has been applied for. An assessment vote has been approved.

The estimated total cost of the Improvement of Walsh County Drain 22 is $738,043, of which $536,858 is eligible for state cost-share assistance at 45 percent ($241,586), and $70,000 pre-construction cost is eligible at 35 percent ($24,500), for a total cost share amount not to exceed $266,086 in state funds.

I recommend the State Water Commission approve this request by the Walsh County Water Resource District for state cost participation in the Improvement of Walsh County Drain 22 at an amount not to exceed $266,086. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits and the availability of funds.

GE:bn/2108

WALSH COUNTY
WATER RESOURCE DISTRICT

600 Cooper Avenue
Grafton, ND 58237

Phone: (701) 352-0081
Fax: (701) 352-5073
Email: wcwrb@nd.gov

May 10, 2017

Beth Nangare
ND State Water Commission
900 E Boulevard Ave.
Bismarck, ND 58505-0850

Subject: Improvements to Walsh County Drain No. 22
Proposal for ND State Water Commission Cost Share

Dear Ms. Nangare,

The Walsh County Water Resource District (WCWRD) respectfully requests consideration for funding for the improvement of Walsh County Drain No. 22. Drain 22 is a combined system consisting of three laterals that each outlet into the Red River. The current itemized cost estimate and plans are attached. The project would provide agricultural drainage for approximately 3,606 acres within Walshville Township of Walsh County. Approximately 3.8 miles of drainage ditch would be excavated, along with changes in culvert sizes as needed and outlet improvements.

The Public Information Hearing was held on February 27, 2017 and the project is currently undergoing the assessment vote as required under ND Century Code 61-21. Both the ND State Drainage Permit has also been submitted. The WCWRD would request that the proposed establishment of Drain No. 22 be considered during the June 22, 2017 ND State Water Commission for funding.

We request that the project be considered for funding under the current cost share policy to the amount of **$266,086.10**. Total project costs are estimated to be **$738,043.00**. An itemized cost estimate and preliminary construction plans are attached.

If you have any questions, please do not hesitate to contact our office at (701) 352-0081.

Sincerely,

Walsh County Water Resource District

COST-SHARE REQUEST FORM

NORTH DAKOTA STATE WATER COMMISSION
DEVELOPMENT DIVISION
SFN 60439 (3/2017)

RECEIVED
MAY 18 2017

This form is to be filled out by the project or program sponsor with State Water Commission staff assistance as needed. Applications for cost-share are accepted at any time. However, applications received less than 30 days before a State Water Commission meeting will be held for consideration at the next scheduled meeting.

Please answer the following questions as completely as possible. Supporting documents such as maps, detailed cost estimates, and engineering reports should be attached to this form. If additional space is required, please use extra sheets as necessary.

For information regarding cost-share program eligibility see the *State Water Commission Cost-Share Policy, Procedure, and General Requirements* – available upon request or at www.swc.nd.gov.

Project, Program, Or Study Name
Improvement of Walsh County Drain 22

Sponsor(s)
Walsh County Water Resource District

County	City	Township/Range/Section
Walsh	Grafton	T155N R51W

Description Of Request ☑ New ☐ Updated (previously submitted)

Specific Needs Addressed By The Project, Program, Or Study
Agricultural Drainage

If Study, What Type ☐ Water Supply ☐ Hydrologic ☐ Floodplain Mgmt. ☐ Feasibility ☐ Other

If Project/Program

☐ Flood Control	☐ Multi-Purpose	☐ Bank Stabilization	☐ Dam Safety/EAP
☐ Recreation	☐ Water Supply	☐ Snagging & Clearing	☐ Property Acquisition
☐ Irrigation	☐ Water Retention	☑ Rural Flood Control	☐ Other

Jurisdictions/Stakeholders Involved
Walsh County Water Resource District
Assessed Landowners

Description Of Problem Or Need And How Project Addresses That Problem Or Need
Drain 22 is a combined system consisting of three laterals that outlet directly into the Red River. The area proposed to be benefited from Drain 22 currently has poor drainage resulting for insufficient channel and culvert capacity. Drain 22 improvements will provide a channel with an 8-foot bottom width and 3:1 sideslopes. Additionally, culvert sizes will also be replaced with the appropriate size to facilitate a 5-year design capacity, as well as meet applicable ND Stream Crossing Standards.

Has Feasibility Study Been Completed?	☐ Yes	☐ No	☐ Ongoing	☑ Not Applicable
Has Engineering Design Been Completed?	☑ Yes	☐ No	☐ Ongoing	☐ Not Applicable
Have Land Or Easements Been Acquired?	☐ Yes	☑ No	☐ Ongoing	☐ Not Applicable

Have You Applied For Any State Permits?	☑ Yes	☐ No	☐ Not Applicable
If Yes, Please Explain ND State Surface Drainage Permit			
Have You Been Approved For Any State Permits?	☐ Yes	☑ No	☐ Not Applicable
If Yes, Please Explain			
Have You Applied For Any Local Permits?	☐ Yes	☑ No	☐ Not Applicable
If Yes, Please Explain			
Have You Been Approved For Any Local Permits?	☐ Yes	☑ No	☐ Not Applicable
If Yes, Please Explain			

Briefly Explain The Level Of Review The Project Or Program Has Undergone
The project was discussed with the assessed landowners at a public informational meeting February 27, 2017.

Do You Expect Any Obstacles To Implementation (i.e., problems with land acquisition, permits, funding, local, opposition, environmental concerns, etc.)? N/A - Landowners are favorable to the project.

Funding Timeline (carefully consider when SWC cost-share will be needed)

Source	Total Cost	2015-2017 7/1/15-6/30/17	2017-2019 7/1/17-6/30/19	Beyond 7/1/19
Federal	$	$	$	$
State Water Commission	$ 266,086.10	$ 266,086.10	$	$
Other State	$	$	$	$
Local	$ 471,956.90	$ 471,956.90	$	$
Total	$ 738,043.00	$ 738,043.00	$	$

List All Other State Of North Dakota Funding Sources (Grant or Loan), For Which You Have Applied
N/A

Please Explain Implementation Timelines, Considering All Phases And Their Current Status
Assessment Vote - Anticipated Spring 2017 (Ongoing)
Finalize Permitting - Summer 2017
Final Bid Documents - Summer 2017
Construction - Fall 2017

Have Assessment Districts Been Formed? ☐ Yes ☐ No ☑ Ongoing ☐ Not Applicable

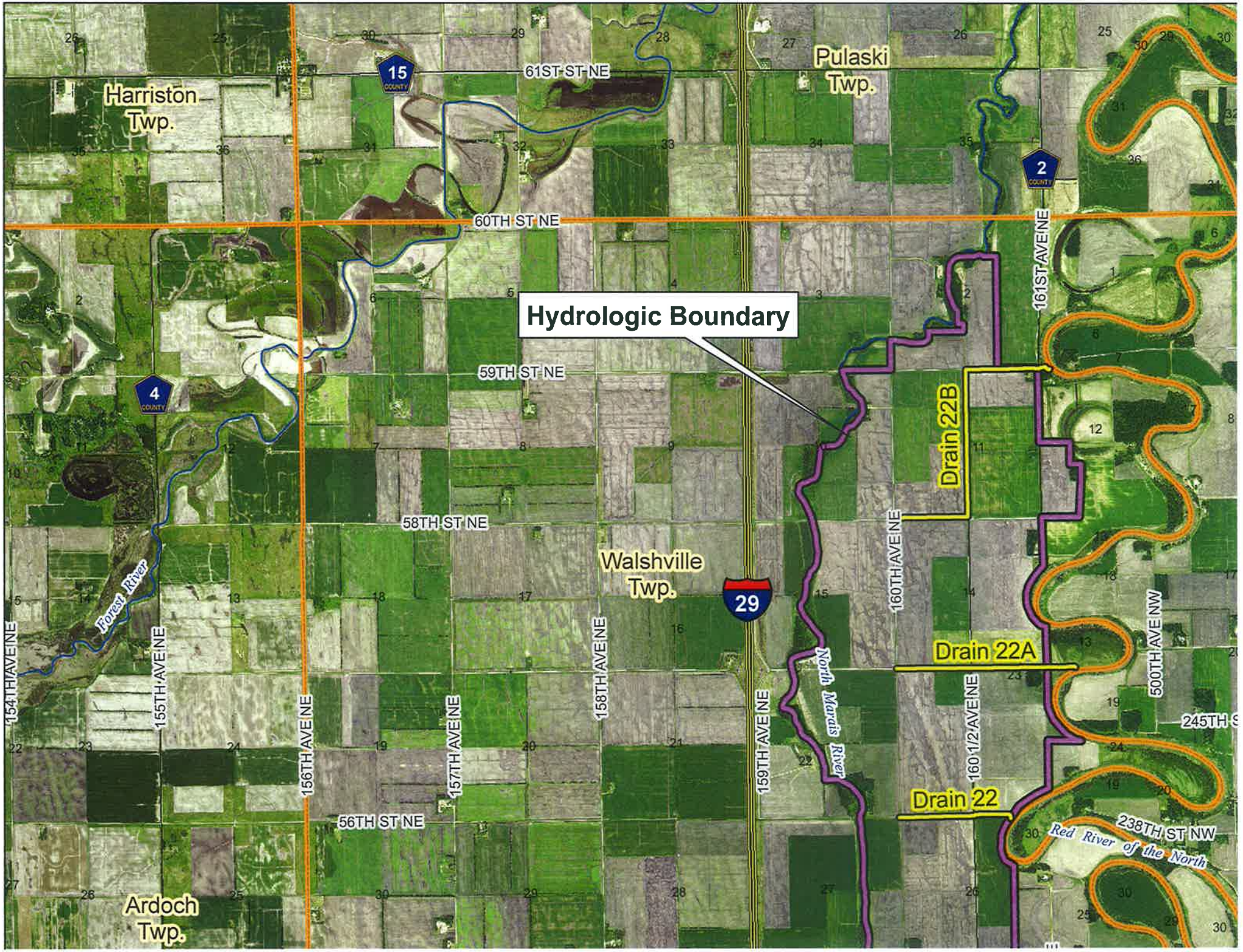
Submitted By Walsh County Water Resource District			Date May 10, 2017
Address 600 Cooper Avenue	City Grafton	State ND	ZIP Code 58237
Telephone Number 701-352-0081			

I Certify That To The Best Of My Knowledge, The Provided Information Is True And Accurate.

Signature [signature] Date 5/16/17

MAIL TO:

ND State Water Commission • ATTN: Cost-Share Program
900 E Boulevard Ave. • Bismarck, ND 58505-0850


Harriston Twp.
Pulaski Twp.
Walshville Twp.
Ardoch Twp.
61ST ST NE
60TH ST NE
59TH ST NE
58TH ST NE
56TH ST NE
Hydrologic Boundary
Drain 22B
Drain 22A
Drain 22
Forest River
North Marais River
Red River of the North
154TH AVE NE
155TH AVE NE
156TH AVE NE
157TH AVE NE
158TH AVE NE
159TH AVE NE
160TH AVE NE
160 1/2 AVE NE
161ST AVE NE
500TH AVE NW
238TH ST NW
245TH S
15
2
4
29

Preliminary Engineer's Opinion of Probable Costs
Drain 22
Walsh County Water Resource District
May 8, 2017

No.	Item	Unit	Quantity	Unit Price	Total Price	NDSWC Cost Share *(Rural Flood Control)*	Walsh County Highway Dept.	Assessed Cost
1	Common Excavation	CY	25,500.00	$ 3.00	$ 76,500.00	$ 34,425.00	$ -	$ 42,075.00
2	Excavation Material Haul	CY	1,800.00	$ 15.00	$ 27,000.00	$ 12,150.00	$ -	$ 14,850.00
3	Stripping & Topsoiling	CY	21,900.00	$ 1.00	$ 21,900.00	$ 9,855.00	$ -	$ 12,045.00
4	Topsoil Haul and Placement	CY	200.00	$ 30.00	$ 6,000.00	$ 2,700.00	$ -	$ 3,300.00
5	Seeding, Mulching, and Fertilizer	AC	21.70	$ 500.00	$ 10,850.00	$ 4,882.50	$ -	$ 5,967.50
6	ND DOT Grade I Riprap	CY	580.00	$ 80.00	$ 46,400.00	$ 20,880.00	$ -	$ 25,520.00
7	ND DOT Grade III Riprap	CY	1,280.00	$ 90.00	$ 115,200.00	$ 51,840.00	$ -	$ 63,360.00
8	30" CMP	LF	48.00	$ 150.00	$ 7,200.00	$ 3,240.00	$ -	$ 3,960.00
9	42" CMP	LF	98.00	$ 200.00	$ 19,600.00	$ 8,820.00	$ 1,148.22	$ 9,631.78
10	48" CMP	LF	102.00	$ 250.00	$ 25,500.00	$ 11,475.00	$ -	$ 14,025.00
11	48" Flapgate	EA	1.00	$ 550.00	$ 550.00	$ 247.50	$ -	$ 302.50
12	71" x 47" CMPA	LF	100.00	$ 330.00	$ 33,000.00	$ 14,850.00	$ 2,538.54	$ 15,611.46
13	Remove Pipe All Sizes and Types	LF	260.00	$ 15.00	$ 3,900.00	$ 1,755.00	$ -	$ 2,145.00
14	Geosynthetic Material Type R1	SY	1,420.00	$ 2.50	$ 3,550.00	$ 1,597.50	$ -	$ 1,952.50
15	Salvage or Replace Aggregate Base Course	CY	121.00	$ 30.00	$ 3,630.00	$ 1,633.50	$ -	$ 1,996.50
16	Clearing and Grubbing	LS	1.00	$ 5,000.00	$ 5,000.00	$ 2,250.00	$ -	$ 2,750.00
17.1	Erosion Control (1)	LS	1.00	$ 3,000.00	$ 3,000.00	$ 1,350.00	$ -	$ 1,650.00
17.2	Erosion Control (2)	LS	1.00	$ 1,000.00	$ 1,000.00	$ 450.00	$ -	$ 550.00
17.3	Erosion Control (3)	LS	1.00	$ 1,000.00	$ 1,000.00	$ 450.00	$ -	$ 550.00
				Construction Subtotal	$ 410,780.00	$ 184,851.00	$ 3,686.76	$ 222,242.24
				Contingencies (10%)	$ 41,078.00	$ 18,485.10	$ 368.68	$ 22,224.22
				Total Construction Cost	**$ 451,858.00**	**$ 203,336.10**	**$ 4,055.44**	**$ 244,466.46**
				Right-of-Way Acquisition - Non-Tillable (Fee Title; 17.6 Acres; Est. $4500/Acre)	$ 79,200.00	$ -	$ -	$ 79,200.00
				Right-of-Way Acquisition - Tillable (Fee Title; 8.6 Acres; Est. $4500/Acre)	$ 38,475.00	$ -	$ -	$ 38,475.00
				Construction Access (Easement; 68.1 Acres; Est. $125/Acre)	$ 8,510.00	$ -	$ -	$ 8,510.00
				Permitting and Environmental Mitigation	$ 5,000.00	$ -	$ -	$ 5,000.00
				Pre-Construction Engineering	$ 70,000.00	$ 24,500.00	$ -	$ 45,500.00
				Construction Engineering	$ 50,000.00	$ 22,500.00	$ -	$ 27,500.00
				Utility Relocates	$ 35,000.00	$ 15,750.00	$ -	$ 19,250.00
				Total Non-Construction Cost	**$ 286,185.00**	**$ 62,750.00**	**$ -**	**$ 223,435.00**
				Total Estimated Project Cost	**$ 738,043.00**	**$ 266,086.10**	**$ 4,055.44**	**$ 467,901.46**

PRELIMINARY PLANS (NOT FOR CONSTRUCTION)
FOR
DRAIN NO. 22 SYSTEM IMPROVEMENTS
WALSH COUNTY WATER RESOURCE DISTRICT
GRAFTON, NORTH DAKOTA
MAY, 2017

Houston Engineering Inc

INDEX OF DRAWINGS:

ENGINEER'S CERTIFICATE

I, ZACHARY O. HERRMANN, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NORTH DAKOTA, HEREBY CERTIFY THAT THE WALSH COUNTY DRAIN NO. 22 IMPROVEMENTS, GRAFTON, NORTH DAKOTA WERE PREPARED UNDER MY SUPERVISION AND ARE COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE: _____

ZACHARY O. HERRMANN, PE
REGISTERED PROFESSIONAL ENGINEER
NORTH DAKOTA REGISTRATION NO. PE-8405

This document is preliminary and not for construction or implementation purposes.

PRELIMINARY

NO.	Revision	Date	By

PRELIMINARY
Not for Construction

Houston Engineering Inc

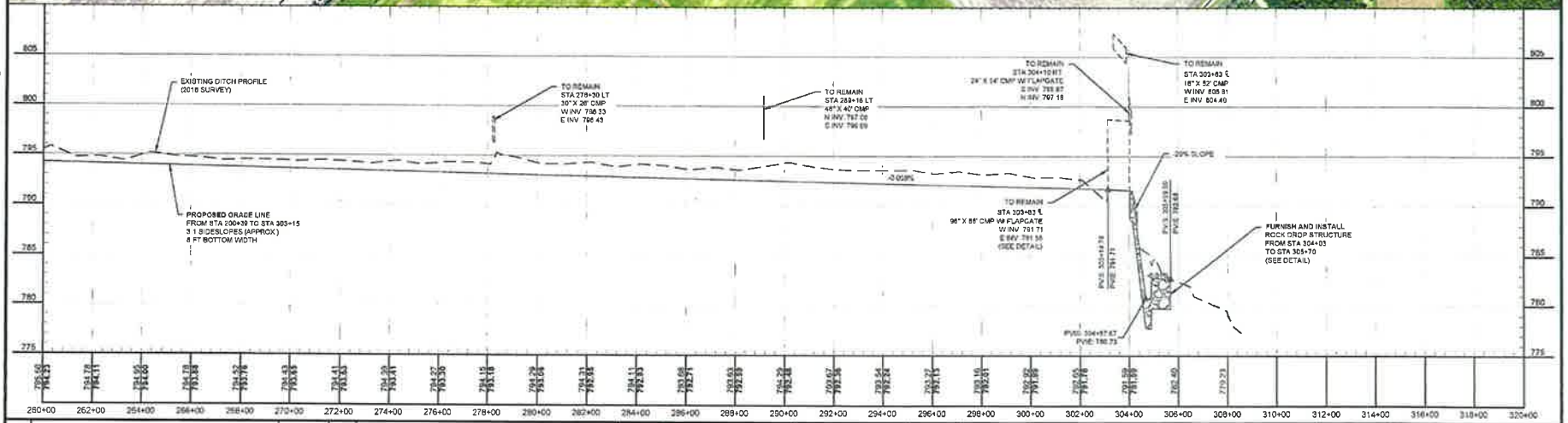
Drawn by	PDL
Date	05-03-2017
Checked by	ZOH
Scale	AS SHOWN

DRAIN 22 SYSTEM IMPROVEMENTS
WALSH COUNTY WATER RESOURCE DISTRICT
GRAFTON, NORTH DAKOTA

DRAIN 22B PLAN AND PROFILE

PROJECT NO 7135-023

SHEET 3 of 36



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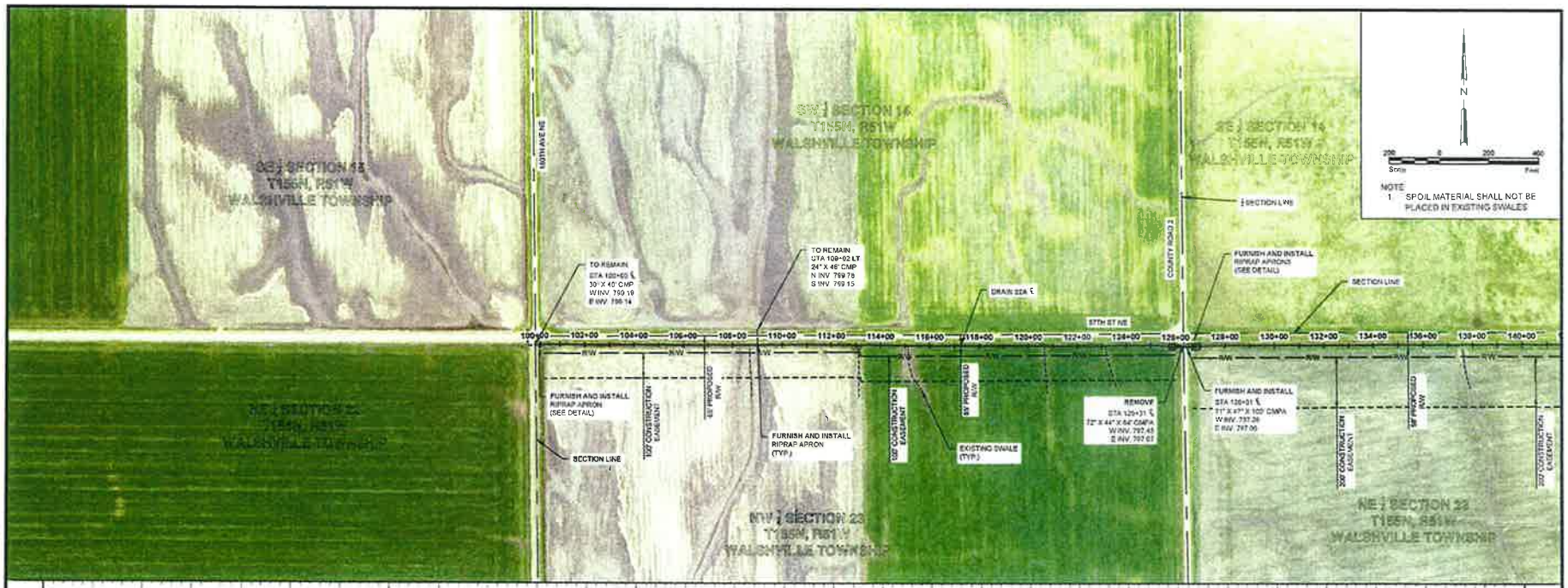
DRAIN 22 SYSTEM IMPROVEMENTS
WALSH COUNTY WATER RESOURCE DISTRICT
GRAFTON, NORTH DAKOTA

DRAIN 22B PLAN AND PROFILE

PROJECT NO. 7135-023

SHEET 4 of 36



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DRAIN 22 SYSTEM IMPROVEMENTS
WALSH COUNTY WATER RESOURCE DISTRICT
GRAFTON, NORTH DAKOTA

DRAIN 22A PLAN AND PROFILE

PROJECT NO. 7135-023

SHEET 16 of 36

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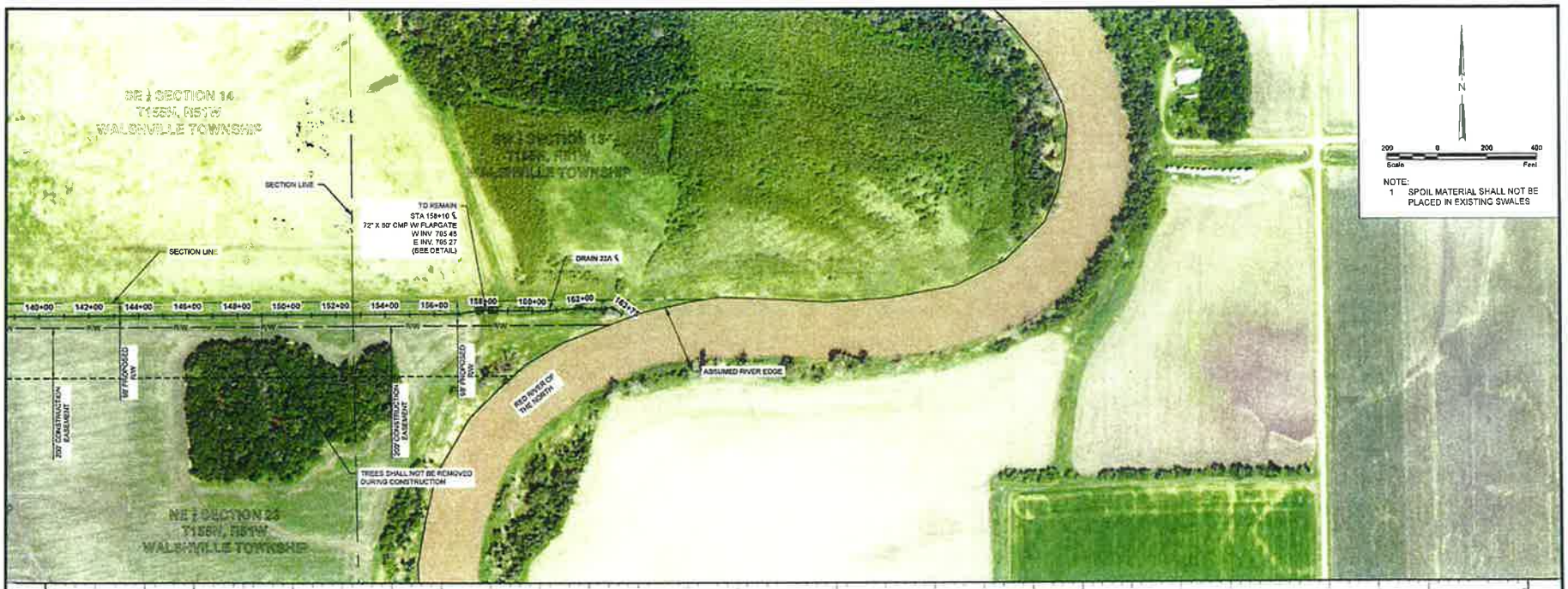

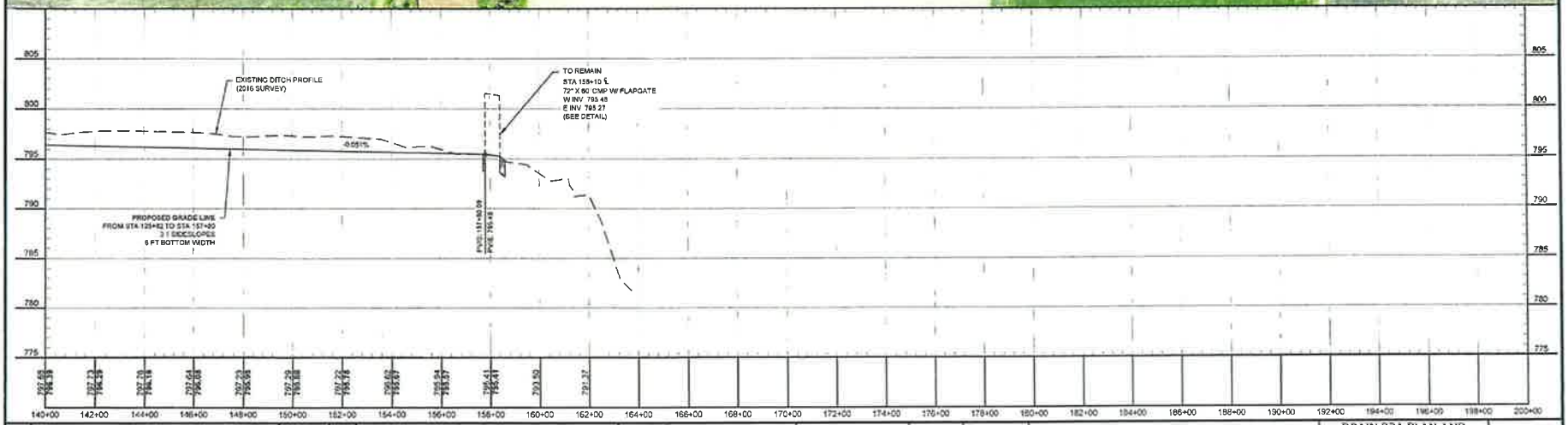

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DRAIN 22 SYSTEM IMPROVEMENTS
WALSH COUNTY WATER RESOURCE DISTRICT
GRAFTON, NORTH DAKOTA

DRAIN 22A PLAN AND PROFILE

PROJECT NO. 7135-023

SHEET 17 of 36

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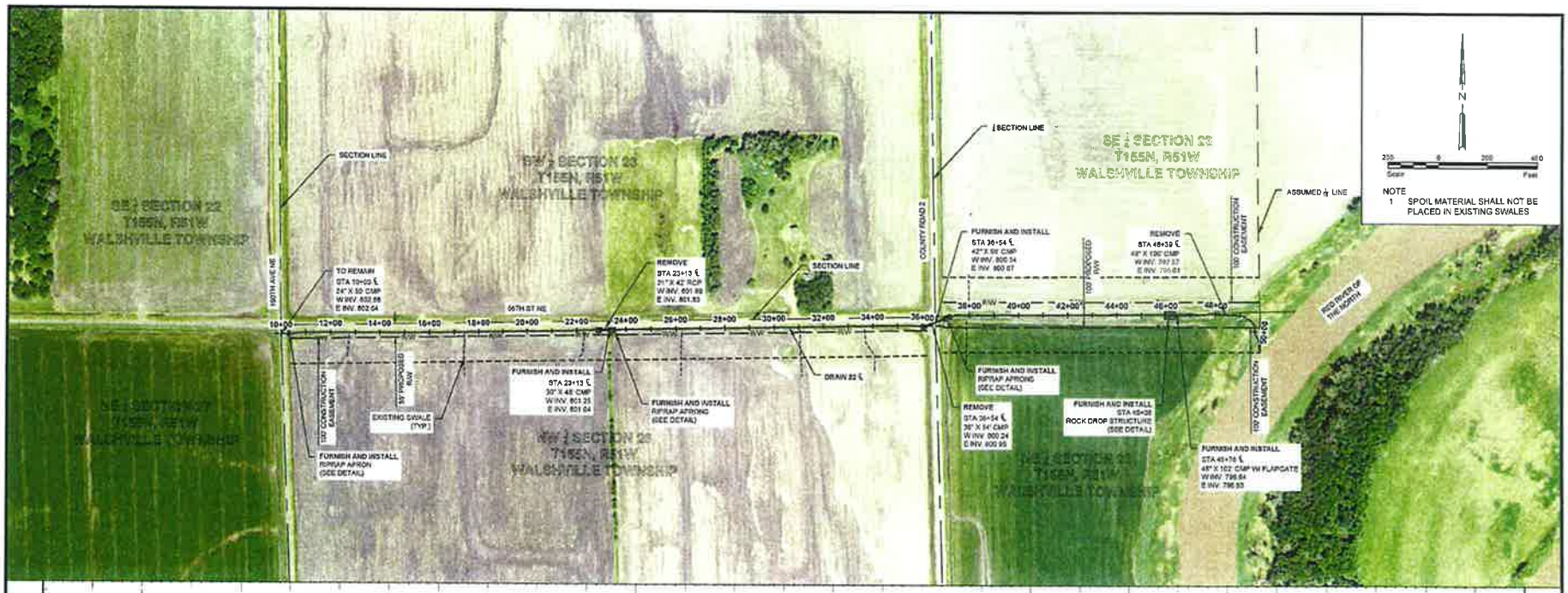
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T165N, R51W
WALSHVILLE TOWNSHIP
SW¼ SECTION 23
T165N, R51W
WALSHVILLE TOWNSHIP
SE¼ SECTION 22
T165N, R51W
WALSHVILLE TOWNSHIP
NW¼ SECTION 26
T165N, R51W
WALSHVILLE TOWNSHIP
NE¼ SECTION 27
T165N, R51W
WALSHVILLE TOWNSHIP
SECTION LINE
COUNTY ROAD 2
190TH AVE NE
667TH ST NE
TO REMAIN
STA 10+00 ℄
24" X 50' CMP
W INV. 802.88
E INV. 802.64
REMOVE
STA 23+13 ℄
21"X 42" RCP
W INV. 801.69
E INV. 801.83
FURNISH AND INSTALL
STA 23+13 ℄
30" X 48' CMP
W INV. 801.25
E INV. 801.04
FURNISH AND INSTALL
RIPRAP APRON
(SEE DETAIL)
EXISTING SWALE
(TYP.)
150' CONSTRUCTION EASEMENT
150' PROPOSED R/W
DRAIN 22 ℄
FURNISH AND INSTALL
STA 36+54 ℄
42" X 50' CMP
W INV. 800.34
E INV. 800.07
REMOVE
STA 36+54 ℄
36" X 54' CMP
W INV. 800.24
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100' PROPOSED R/W
100' CONSTRUCTION EASEMENT
ASSUMED ℄ LINE
REMOVE
STA 46+39 ℄
48" X 102' CMP
W INV. 797.57
E INV. 795.81
FURNISH AND INSTALL
STA 45+28
ROCK DROP STRUCTURE
(SEE DETAIL)
FURNISH AND INSTALL
STA 46+76 ℄
48" X 102' CMP W FLAPGATE
W INV. 796.84
E INV. 796.63
RED RIVER OF THE NORTH
N
250 0 250 500
Scale Feet
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1 SPOIL MATERIAL SHALL NOT BE PLACED IN EXISTING SWALES
TO REMAIN
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24" X 50' CMP
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E INV. 802.64
FURNISH AND INSTALL
STA 23+13 ℄
30" X 48' CMP
W INV. 801.25
E INV. 801.04
REMOVE
STA 23+13 ℄
21"X 42' RCP
W INV. 801.69
E INV. 801.83
EXISTING DITCH PROFILE
(2016 SURVEY)
-0.003%
-0.005%
-0.008%
FURNISH AND INSTALL
RIPRAP APRON
(SEE DETAIL)
PROPOSED GRADE LINE
FROM STA 10+24 TO STA 22+89
3:1 SIDESLOPES (APPROX.)
6 FT BOTTOM WIDTH
PROPOSED GRADE LINE
FROM STA 23+37 TO STA 36+07
3:1 SIDESLOPES (APPROX.)
6 FT BOTTOM WIDTH
FURNISH AND INSTALL
RIPRAP APRONS
(SEE DETAIL)
REMOVE
STA 36+54 ℄
36" X 54' CMP
W INV. 800.24
E INV. 800.05
FURNISH AND INSTALL
STA 36+54 ℄
42" X 50' CMP
W INV. 800.34
E INV. 800.07
PROPOSED GRADE LINE
FROM STA 37+05 TO STA 47+94
3:1 SIDESLOPES (APPROX.)
6 FT BOTTOM WIDTH
FURNISH AND INSTALL
STA 45+28
ROCK DROP STRUCTURE
(SEE DETAIL)
FURNISH AND INSTALL
STA 46+76 ℄
48" X 102' CMP W FLAPGATE
W INV. 796.84
E INV. 796.63
REMOVE
STA 46+39 ℄
48" X 102' CMP
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PVE 802.64
PVIS 23+48.33
PVE 801.23
PVIS 37+06.11
PVE 799.02
PVIS 45+05.53
PVE 795.88
PVIS 45+27.45
PVE 795.84
810
805
800
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785
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0+00 2+00 4+00 6+00 8+00 10+00 12+00 14+00 16+00 18+00 20+00 22+00 24+00 26+00 28+00 30+00 32+00 34+00 36+00 38+00 40+00 42+00 44+00 46+00 48+00 50+00 52+00 54+00 56+00 58+00 60+00
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801.27 800.78
801.04 800.67
800.90 800.66
800.64 800.46
800.19 800.14
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PRELIMINARY
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Houston Engineering Inc.
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DRAIN 22 SYSTEM IMPROVEMENTS
WALSH COUNTY WATER RESOURCE DISTRICT
GRAFTON, NORTH DAKOTA
DRAIN 22 PLAN AND PROFILE
PROJECT NO. 7135-023
SHEET
26 of 36

North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
(701) 328-2750 • TTY 1-800-366-6888 or 711 • FAX (701) 328-3696 • http://swc.nd.gov

Agenda #5)

MEMORANDUM

TO: Governor Doug Burgum
State Water Commission Members

FROM: Garland Erbele, P.E., Chief Engineer-Secretary

DATE: May 24, 2017

SUBJECT: Red River Basin Commission (RRBC) funding for the 2017-2019 biennium.

The RRBC has requested continued funding assistance in the amount of $200,000 for the 2017-2019 biennium. This will provide base funding support from the State Water Commission with payments provided on a semi-annual basis-contingent upon their progress. The funding will support activities outlined in the attached RRBC letter.

The RRBC's 44-member board of directors represents a broad cross section of local and state/provincial governments and other interests. The SWC has helped fund the RRBC and its predecessor, the Red River Basin Board for a number of years. Minnesota, Manitoba, and local governments in the three major jurisdictions have done likewise.

I recommend the Commission approve funding for the RRBC's proposal in an amount not to exceed $200,000 from the funds appropriated to the State Water Commission for the 2017-2019 biennium. Funding of this project shall be contingent upon the availability of funds.

GE:JH/AOC/RRBC

COST-SHARE REQUEST FORM

NORTH DAKOTA STATE WATER COMMISSION
DEVELOPMENT DIVISION
SFN 60439 (3/2017)

This form is to be filled out by the project or program sponsor with State Water Commission staff assistance as needed. Applications for cost-share are accepted at any time. However, applications received less than 30 days before a State Water Commission meeting will be held for consideration at the next scheduled meeting.

Please answer the following questions as completely as possible. Supporting documents such as maps, detailed cost estimates, and engineering reports should be attached to this form. If additional space is required, please use extra sheets as necessary.

For information regarding cost-share program eligibility see the *State Water Commission Cost-Share Policy, Procedure, and General Requirements* – available upon request or at www.swc.nd.gov.

Project, Program, Or Study Name
Red River Basin Commission

Sponsor(s)
Red River Basin Commission

County	City	Township/Range/Section
Cass	**Fargo**	

Description Of Request ■ New ☐ Updated (previously submitted)

Specific Needs Addressed By The Project, Program, Or Study
Comprehensive integrated basin-wide vision for the Red River Basin

If Study, What Type ☐ Water Supply ☐ Hydrologic ☐ Floodplain Mgmt. ☐ Feasibility ☐ Other

If Project/Program

☐ Flood ☐ ControlMulti- ☐ PurposeBank ☐ StabilizationDam Safety/EAP
☐ RecreationWater ☐ SupplySnagging & ☐ ClearingProperty ☐ Acquisition
☐ IrrigationWater ☐ RetentionRural ☐ Flood Control ■ Other

Jurisdictions/Stakeholders Involved

The RRBC is led by 44 directors representing North Dakota, Minnesota, South Dakota and Manitoba and is comprised of counties, cities, water resource districts, state and provincial agencies, grassroots citizens, First Nations and the environmental community.

Description Of Problem Or Need And How Project Addresses That Problem Or Need

Need: To create a comprehensive integrated basin-wide vision, to build consensus and commitment to the vision, and to speak with a unified voice for the Red River Basin.

The RRBC is a charitable, not-for-profit organizations designed to help facilitate a cooperative approach to water management within the Red River Basin and is a well-established forum for identifying, developing, and implementing solutions to cross-boundary issues.

Has Feasibility Study Been Completed? ☐ Yes ☐ No ☐ Ongoing ■ Not Applicable

Has Engineering Design Been Completed? ☐ Yes ☐ No ☐ Ongoing ■ Not Applicable

Have Land Or Easements Been Acquired? ☐ Yes ☐ No ☐ Ongoing ■ Not Applicable

Have You Applied For Any State Permits?	☐ Yes	☐ No	■ Not Applicable
If Yes, Please Explain			
Have You Been Approved For Any State Permits?	☐ Yes	☐ No	■ Not Applicable
If Yes, Please Explain			
Have You Applied For Any Local Permits?	☐ Yes	☐ No	■ Not Applicable
If Yes, Please Explain			
Have You Been Approved For Any Local Permits?	☐ Yes	☐ No	■ Not Applicable
If Yes, Please Explain			

Briefly Explain The Level Of Review The Project Or Program Has Undergone

NA

Do You Expect Any Obstacles To Implementation (i.e., problems with land acquisition, permits, funding, local, opposition, environmental concerns, etc.)? **NA**

Funding Timeline (carefully consider when SWC cost-share will be needed)

Source	Total Cost	2015-2017 7/1/15-6/30/17	2017-2019 7/1/17-6/30/19	Beyond 7/1/19
Federal	$	$	$	$
State Water Commission	$	$	$ 200,000.00	$
Other State	$	$	$	$
Local	$	$	$	$
Total	$	$	$ 200,000.00	$

List All Other State Of North Dakota Funding Sources (Grant or Loan), For Which You Have Applied

NA

Please Explain Implementation Timelines, Considering All Phases And Their Current Status

NA

Have Assessment Districts Been Formed? ☐ Yes ☐ No ☐ Ongoing ■ Not Applicable

Submitted By **Lance Yohe, Red River Basin Commission**			Date **5/24/2017**
Address **1120 28th Ave. N, Suite C**	City **Fargo**	State **ND**	ZIP Code **58102**
Telephone Number **701-356-3183**	Sponsor Email lance@redriverbasincommission.org	Engineer Email **NA**	

I Certify That, To The Best Of My Knowledge, The Provided Information Is True And Accurate.

Signature Lance Yohe	Date **5/24/17**

MAIL TO:

ND State Water Commission • ATTN: Cost-Share Program
900 E Boulevard Ave. • Bismarck, ND 58505-0850

Red River Basin Commission

Manitoba • Minnesota • North Dakota • South Dakota

Fargo Office: 1120 28th Avenue North, Suite. C, Fargo ND 58102
Phone 701-356-3183 • FAX 701-235-7394

Winnipeg Office: 205 – 1100 Concordia Ave. • Winnipeg, MB R2K 4B8
Phone 204-982-7250 • FAX 204-982-7255 • info@redriverbasincommission.org

www.redriverbasincommission.org

Garland Erbele, State Engineer
ND State Water Commission
900 E. Blvd., Dept. 770
Bismarck, ND 58505

Dear Mr. Erbele:

The vision, work and activities of the Red River Basin Commission (RRBC) are producing results in creating a shared basin vision for the future. The Red River Basin (RRB) Natural Resource Framework Plan (NRFP) 13 Goals are the cornerstone of this vision.

RRBC is uniquely positioned to promote and is working on key basin wide activities related to: water supply, flood damage reduction including; mainstem modeling, flow reduction goals and distributed storage, water quality, soil conservation-land use issues, fish wildlife and aquatic ecosystem health, recreation plus public support and jurisdictional dialogue.

We are requesting the 2017/2019 (the biennium) base funding support from the State Water Commission (SWC) and that the payments be made on a semi-annual basis as follows: (December 31, 2017; June 30, 2018; December 31, 2018; and June 30, 2019). We are also requesting that the base funding be related to the following areas of RRBC Natural Resource Framework (NRFP) activities.

- NRFP Goal #1: Working across political boundaries.
  - International Red River Board (IRRB): The RRBC has two appointed representatives on the IRRB. This group meets twice a year. They discuss issues related to the international boundary and report to the International Joint Commission.
  - Pembina River Basin Advisory Board (PRBAB): RRBC is prepared to coordinate and facilitate regular meetings this biennium with a special focus on the jurisdictional dialogue on the Pembina Road/Dyke if requested by North Dakota. The Pembina River Task Team (PRBTT) is positioned to meet to further understand the issue and discuss options that could be looked at in the future. RRBC has and will continue to work closely with Randy Gjestvang on reviewing the additional modeling work that was completed and what options currently exist for moving forward.
  - South Valley Initiative (SVI): Regular meetings this biennium with a focus on retention/detention sites linked to upstream storage that target

reduced flood flows of 20% and apply methods for improving water quality. We will also be utilizing this group for future workshops related to water quality, soil health management and drainage water management in coordination with the Red River Retention Authority. These meetings are set to take place in early 2018. There will be at least 4 of these meetings.

- RRBC will continue connecting the basin NRFP with the SWC biennium plan implementation and the joint Water Resource District (WRD) efforts and the Red River Retention Authority (RRRA). This effort will include working with key staff at the SWC and at the WRD level.
- RRBC will continue to work with and support the Devils Lake Executive Committee (DLEC) and Devils Lake Working Group (DLWG).

- NRFP Goal # 2: Integration. This goal is related to the integration of the goal focus areas. This effort will be guided by the basin outreach strategy that continues to present the NRFP to the public and leadership on all levels. Buy in to the NRFP through the "Resolution of Support" continues through the outreach effort.
  - Working Groups (WG's) in NRFP Goal areas as staff time permits to assist in updating the NRFP Objectives and Action Agenda, identification of basin activities that are addressing basin goals, identification of areas that need assistance, and the identification of the role RRBC can best provide or what other entity is best positioned to assist.
  - RRBC will continue to refine the NRFP tracking, review and reporting process that will assist in the identification of gaps, celebration of successes (that continues to be part of Annual Summit Conferences), and the NRFP update process.
  - RRBC is currently assisting and providing guidance in the US Army Corp of Engineers Red River Basin Comprehensive Watershed Management Plan. Under this plan, 6 focus goal areas have been identified: Flood risk management and hydrology (NRFP Goal #s 5,6,7 and 8); Aquatic and Riparian Ecosystem Restoration (NRFP Goal #12); Water Quality (NRFP Goal #9); Water Supply and Drought Management (NRFP Goal #10); Recreation (NRFP Goal #13); Soil Health (NRFP Goal #11). RRBC is facilitating the 6 working groups in identifying opportunities for potential funding/participation from the federal government. The working group review process has concluded and a letter of support is being requested from the RRBC Board.
  - The RRBC will continue to bring together individual Working Group members of the 6 focus goal areas to discuss and identify opportunities for integration. The integrated working group meetings will be held once per year.
- NRFP Goal # 3: Data and Technology.
  - Continue to develop and assist with technology and models as appropriate.

- NRFP Goal # 4: Education and Communication.
    - Water Minutes and Ripple Effects
    - Annual Summit Conferences
    - Celebrating Successes in the Red River Basin
    - Basin-wide Outreach
    - Social media and redesign of RRBC website
- NRFP Goal # 5: Forecasting.
    - Forecast Working Group has completed the report on needs, gaps, and a path forward for gaging and precipitation data collection. RRBC will begin to help facilitate the implementation of the recommendations of this report.
- NRFP Goal # 6: Flood Damage Reduction.
    - This goal is related to the Long Term Flood Solutions (LTFS) project and the recommendations in that report. An update to the LTFS report was completed in January 2015. As part of the LTFS project, the RRBC will continue to track and encourage progress on the recommendations.
    - There will be follow up work on modeling for the Pembina and Roseau Rivers. This will generate better flow data at the international boundary and then modeling flow reduction scenarios for tributaries to generate basin wide discussion to move toward tributary flow reduction goals. Current efforts underway with numerous Departments in Manitoba beginning with the two watersheds along the Canadian border Pembina and Roseau to complete updated HEC-HMS and HEC-RAS using LIDAR driven inputs.
    - Halstad Upstream Modeling effort has been completed with the final report to the Fargo-Moorhead Diversion Authority. Additional efforts are underway to complete this modeling north of Halstad to the Canadian border to integrate newly identify retention/detention sites that if built would produce 20% flow reductions on the mainstem. We are coordinating with the US Army Corp of Engineers on this second reach of Red River modeling.
    - The RRBC will continue to follow and participate in the efforts of the Red River Retention Authority as it relates to funds for retention/detention strategies in the Red River Basin through the Natural Resources Conservation Service. The RRBC has been asked to assist in coordination and facilitation of future workshops related to soil health management and drainage water management with the Red River Retention Authority. These meetings are set to take place in early 2018. There will be at least 4 of these meetings.
- NRFP Goal # 8: Drainage
    - The Drainage WG will continue to work on the implementation of strategies that were identified in the Tile Drainage Study as well as the Surface Drainage Study. RRBC will connect efforts to increase understanding of sub-surface and surface drainage.

- The RRBC-North Chapter co- hosted with the RRBC South Chapter, the Province of Manitoba and PVCD, LSRCD, EICD, SRRCD, along with ARBI on a four-series webinar on Tile Drainage for Manitoba in February. As part of the Bush Foundation grant for community outreach, we are distributing an educational postcard in the US portion of the basin that includes links to the webinar series.

- NRFP Goal # 9: Water Quality
  - Continue to work with IRRB, the states and the province to identify basin water quality commonalities and goals. The IRRB Water Quality Committee is currently evaluating basin-wide nutrient reduction goals and objectives for recommendation.
  - RRBC has participated and contributed to various efforts in the engagement process for the North Dakota Nutrient Reduction strategy. We will continue to assist when needed in this process.
  - RRBC is working with ND Department of Health, Minnesota Pollution Control Agency and Manitoba Conservation and Water Stewardship to explore the development of a Basin-wide Nutrient Reduction Strategy.
- NRFP Goal # 10: Water Supply
  - RRBC will continue to expand the basin water supply effort by actions related to the Drought Scoping Document recommendations. We will continue to pursue opportunities related to the development of a Long Term Drought Preparedness Strategy for the Red River Basin. RRBC will be meeting with the Water Supply Workgroup to explore the development a Basinwide water supply plan.
- NRPF Goal # 12-13: Fish, Wildlife, Outdoor Recreation
  - RRBC will link to Minnesota counties Aquatic Invasive Species efforts for expansion to a basin wide approach to help limit AIS into the Red River system.
  - RRBC will work with COE on this goal area as part of their Comprehensive Plan.
  - The RRBC participates as a member of the North Dakota Aquatic Invasive Species Committee. This committee meets twice per year.

RRBC is requesting the $200,000 ND State 2017/2019 base funding for RRBC through the biennium. The RRBC activities mentioned above have been discussed with Pat Fridgen. The work plan summary for the activities that relate to the ND base funding is as follows:

- Goal # 1: Ongoing meetings 1-4 times year for PRBAB and SVI for the biennium. Regular reporting and linkages to WRD and Joint Boards at their scheduled meetings. If Road/Dyke discussions move forward, meetings as needed will be scheduled. RRBC will coordinate and continue to provide tours of relevance in the basin (approximately 2-4 tours). July 2017-June 2019.

- Goal # 2: Annual integrated working group meetings to bring together participants in each of the 6 focus goals areas. Expected completion of the Comprehensive Watershed Management Plan project with USACE by December 2017. July 2017 – June 2019
- Goal #3: Continue to participate in the USGS effort to perform a comprehensive up-to-date water-quality trend analysis using QWTrend for sites. This ties into the Water Quality work being done through IRRB and RRBCs Water Quality Strategic Plan for the RRB. July 2017 – June 2019
- Goal # 4: Complete the next two annual summit conferences: 35th in January 2018 and 36th in January 2019. "Success Stories" and NRFP reports as needed for the annual summit conferences: January 2018 and 2019. Continue outreach to update basin on activities of the RRBC. Develop and distribute educational postcard on the Manitoba tile drainage webinars. Assist the Red River Retention Authority with drainage and soil health workshops in early 2018. July 2017 – June 2019
- Goal # 5: Forecast Working Group has completed the report on needs, gaps, and a path forward for gaging and precipitation data collection. RRBC will continue to facilitate the implementation of the recommendations of this report. July 2017 – June 2019
- Goal # 6: Update the LTFS as needed. July 2017 – June 2019. Continue to the monitor the progress of modeling efforts from Halstad, MN to the international border.
- Goal # 8: Utilize the Drainage WG to coordinate efforts and understanding on sub-surface and surface drainage during the next biennium. Coordinate and facilitate drainage workshop at 2018 Annual Conference. July 2017-June 2019.
- Goal # 9: Regular meetings on the issues between the jurisdictions connected through IRRB to address the work plan that is being followed. And seek funds for basin wide water quality modeling that will determine nutrient load allocations. RRBC will be working closely with various groups to move the Cattail Nutrient Management Project forward to test and demonstrate science based watershed approaches to nutrient management using the Bois de Sioux' North Ottawa site. July 2017-June 2019.
- Goal # 10: Continue to identify opportunities to begin work on a basin-wide long term drought preparation strategy mirroring the process laid forth by the LTFS. We will follow the progress of the State of North Dakota in regards to the Eastern Water Supply project. July 2017-June 2019.
- Goals # 12 & 13: Continue participation on the ND Aquatic Invasive Species Committee. Participate in workshops, task teams, conferences as needed. July 2017-June 2019
- Work on NRFP Goals # 1, 2, 3, 4, 5, 6, 8, 9, 10, 12, & 13 as funding and staff allow. July 2017-June 2019.

I am available for a future SWC meeting to answer questions regarding this request. Thank you for continued support and participation in the RRBC and Red River activities.

Sincerely,

Lane Yohe
Executive Director, RRBC
Cell: 763-226-4016
Email: lance@redriverbasincommission.org

North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
(701) 328-2750 • TTY 1-800-366-6888 or 711 • FAX (701) 328-3696 • http://swc.nd.gov

Agenda #6)

MEMORANDUM

TO: Governor Doug Burgum
State Water Commission Members

FROM: Garland Erbele, P.E., Chief Engineer-Secretary

DATE: May 24, 2017

SUBJECT: Assiniboine River Basin Initiative (ARBI) funding for the 2017-2019 biennium.

The ARBI has requested funding assistance in the amount of $100,000 for the 2017-2019 biennium. This will provide base funding support from the State Water Commission with payments provided on an annual basis-contingent upon their progress. The funding will be coupled with other funds to assist the ARBI with key projects identified by stakeholders for the benefit of the Assiniboine River Basin.

The Assiniboine River Basin encompasses portions of Manitoba, Saskatchewan, and North Dakota. The ARBI's stakeholders include citizens, local governments, provincial/state governments, businesses, non-governmental organizations, and other groups willing to help shape the future direction of the basin. In addition to the SWC, collaborating entities in North Dakota include the Department of Agriculture, Department of Environmental Quality, Ward County, and the City of Minot.

I recommend the Commission approve funding for the ARBI's proposal in an amount not to exceed $100,000 from the funds appropriated to the State Water Commission for the 2017-2019 biennium. Funding of this project shall be contingent upon the availability of funds.

GE:JH/AOC/ARBI

COST-SHARE REQUEST FORM

NORTH DAKOTA STATE WATER COMMISSION
DEVELOPMENT DIVISION
SFN 60439 (3/2017)

This form is to be filled out by the project or program sponsor with State Water Commission staff assistance as needed. Applications for cost-share are accepted at any time. However, applications received less than 30 days before a State Water Commission meeting will be held for consideration at the next scheduled meeting.

Please answer the following questions as completely as possible. Supporting documents such as maps, detailed cost estimates, and engineering reports should be attached to this form. If additional space is required, please use extra sheets as necessary.

For information regarding cost-share program eligibility see the *State Water Commission Cost-Share Policy, Procedure, and General Requirements* – available upon request or at www.swc.nd.gov.

Project, Program, Or Study Name
Assiniboine River Basin Initiative (ARBI)

Sponsor(s)
Assiniboine River Basin Initiative

County	City	Township/Range/Section
	Maxbass	

Description Of Request ☑ New ☐ Updated (previously submitted)

Specific Needs Addressed By The Project, Program, Or Study
Working with all stakeholders to achieve a resiliency through basin-wide comprehensive integrated watershed actions that will be

If Study, What Type ☐ Water Supply ☐ Hydrologic ☐ Floodplain Mgmt. ☐ Feasibility ☑ Other

If Project/Program

☐ Flood Control	☐ Multi-Purpose	☐ Bank Stabilization	☐ Dam Safety/EAP
☐ Recreation	☐ Water Supply	☐ Snagging & Clearing	☐ Property Acquisition
☐ Irrigation	☐ Water Retention	☐ Rural Flood Control	☑ Other

Jurisdictions/Stakeholders Involved
The ARBI encompasses the State of North Dakota, as well as the Provinces of Manitoba & Saskatchewan. Stakeholders in North Dakota include not only the NDSWC, but the Department of Agriculture and the newly formed Department of Environmental Quality. As well, the City of Minot and Ward County participate as well as a water resource boards in the Mouse Basin. A member at large from North Dakota is also engaged on the board.

Description Of Problem Or Need And How Project Addresses That Problem Or Need
ARBI is a water based organization that is working with a multitude of stakeholders collaboratively and cooperatively on watershed actions across the entire basin.

A Framework Plan has been identified and a number of projects will be undertaken over the course of the next two years with stakeholders on the board as well as in cooperation with other agencies such as the Red River Basin Commission (RRBC). The Framework Plan has four key areas: to increase stakeholder understanding of the basin, to increase basin-wide stakeholder decision making capabilities, to create a more resilient basin respecting water issues and to develop a basin strategy for addressing land use issues, base on jurisdictional approaches. (Copy attached.)

Work is currently underway in partnership with the Red River Basin Commission to update the drainage regulation document for information purposes. Other shared documents of joint interest will also be reviewed. We have also recently completed a very successful series of four webinars on tile drainage in partnership with RRBC and others.

Has Feasibility Study Been Completed?	☐ Yes	☐ No	☐ Ongoing	☑ Not Applicable
Has Engineering Design Been Completed?	☐ Yes	☐ No	☐ Ongoing	☑ Not Applicable
Have Land Or Easements Been Acquired?	☐ Yes	☐ No	☐ Ongoing	☑ Not Applicable

Have You Applied For Any State Permits?	☐ Yes	☐ No	☑ Not Applicable
If Yes, Please Explain			
Have You Been Approved For Any State Permits?	☐ Yes	☐ No	☑ Not Applicable
If Yes, Please Explain			
Have You Applied For Any Local Permits?	☐ Yes	☐ No	☑ Not Applicable
If Yes, Please Explain			
Have You Been Approved For Any Local Permits?	☐ Yes	☐ No	☑ Not Applicable
If Yes, Please Explain			

Briefly Explain The Level Of Review The Project Or Program Has Undergone

Stakeholders from across the basin have been engaged since the inception of ARBI in our development, direction and work undertaken on their behalf. This will continue through working sessions with stakeholders at the annual conference, events, meetings, etc.

Do You Expect Any Obstacles To Implementation (i.e., problems with land acquisition, permits, funding, local, opposition, environmental concerns, etc.)? Not applicable.

Funding Timeline (carefully consider when SWC cost-share will be needed)

Source	Total Cost	2015-2017 7/1/15-6/30/17	2017-2019 7/1/17-6/30/19	Beyond 7/1/19
Federal	$	$	$	$
State Water Commission	$	$	$ 100,000.00	$
Other State	$	$	$	$
Local	$	$	$	$
Total	$ 0	$ 0	$ 0	$ 0

List All Other State Of North Dakota Funding Sources (Grant or Loan), For Which You Have Applied

Not appliciable

Please Explain Implementation Timelines, Considering All Phases And Their Current Status

ARBI continues to develop and deliver a variety of projects that are of benefit to all basin stakeholders. The ask of $50,000 per year for the 2017-2019 biennium will be coupled with other funds to assist the ARBI in the deliver of key projects identified by stakeholders for the benefit of the basin.

Have Assessment Districts Been Formed? ☐ Yes ☐ No ☐ Ongoing ☑ Not Applicable

Submitted By: Assiniboine River Basin Initiatiive			Date: May 17, 2017
Address: 8874 18th Ave. NW	City: Maxbass	State: ND	ZIP Code: 58760
Telephone Number: 204-795-6672	Sponsor/Engineer Email: Wanda McFadyen		

I Certify That, To The Best Of My Knowledge, The Provided Information Is True And Accurate.

Signature: Wanda McFadyen	Date: May 17, 2013

MAIL TO:

ND State Water Commission • ATTN: Cost-Share Program
900 E Boulevard Ave. • Bismarck, ND 58505-0850

ARBI
ASSINIBOINE RIVER BASIN INITATIVE

Qu'Appelle • Souris • Assiniboine

FINAL DRAFT

ASSINIBOINE RIVER BASIN

FRAMEWORK FOR WATERSHED STEWARDSHIP

PREPARED BY:

ASSINIBOINE RIVER BASIN INITIATIVE (ARBI)

March, 2017

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Funding support for this Project was made possible due to funding from the Government of Manitoba and Canada, through the Growing Forward 2, Growing Actions Program.

Canada

Growing Forward 2
A federal-provincial-territorial initiative

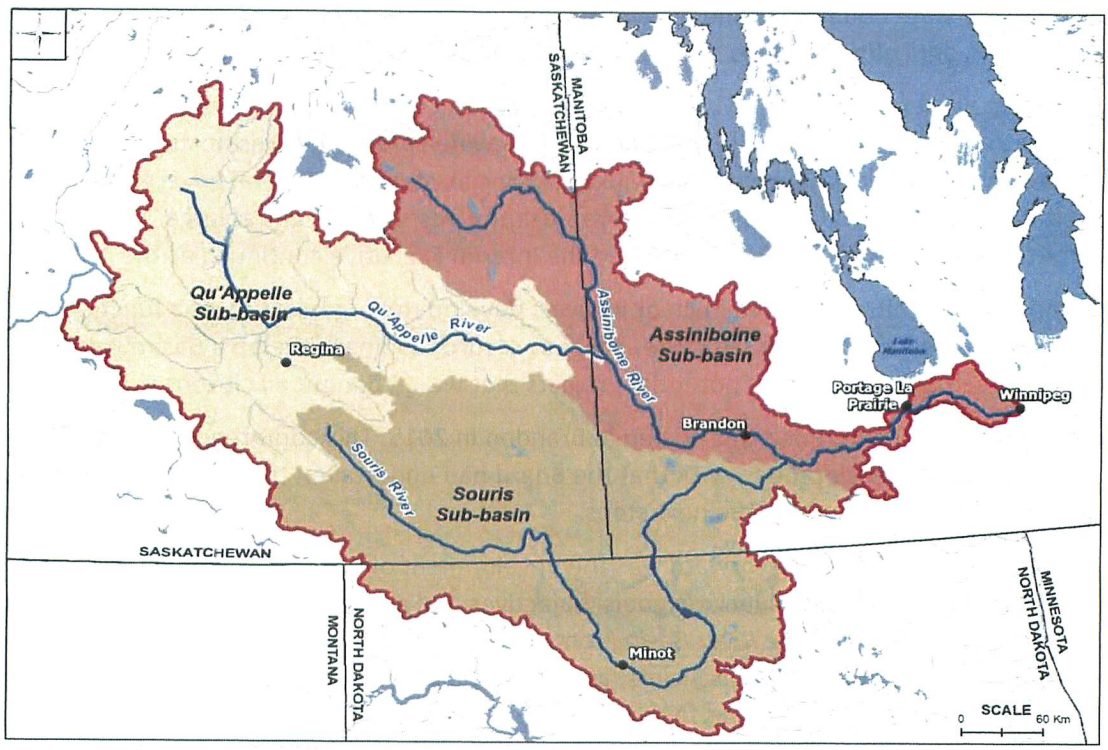
Manitoba

Introduction

Assiniboine River Basin Framework for Watershed Stewardship (Framework)

The Assiniboine River Basin

The Assiniboine River Basin (Basin) encompasses the Qu'Appelle, Souris and Assiniboine River watersheds in parts of two Canadian provinces, Saskatchewan and Manitoba, and one U.S. state, North Dakota. Most of the Assiniboine River Basin water flows into the Red River at Winnipeg, but some flows can be diverted, when necessary, through the Portage Diversion into Lake Manitoba, with the final outflow of both being Lake Winnipeg. The Basin is approximately 162,000 square kilometers and home to over 1.5 million people.



Assiniboine River Basin Initiative
Three Rivers – One Basin

The Assiniboine River Basin Initiative (ARBI)

The Assiniboine River Basin Initiative (ARBI) is a multi-stakeholder non-profit organization, operating in Canada and the United States in the Assiniboine River Basin (Basin) in Manitoba, North Dakota and Saskatchewan. ARBI stakeholders include: citizens; local governments; provincial and state governments; businesses/industry; non-governmental organizations; local groups such as cottager

associations and agriculture organizations; and other groups that wish to work together and help shape the future direction of the Basin through action around a shared vision.

In 2008, the Province of Manitoba commissioned a report on the Basin through the Red River Basin Commission (RRBC). Based on stakeholder meetings, the report highlighted strong interest to work together in a collaborative manner on issues of common concern. Strong support was shown for the formation of a group like RRBC.

While the 2008 report did not bear fruit immediately, in late 2013, under the guidance of the Prairie Improvement Network, a Basin-wide water management initiative resurfaced. Their goal was to facilitate and support a coordinated approach to water related issues in the Basin. The original Steering Committee, with representation from all three jurisdictions (ND, SK, MB), was re-engaged. A multi-stakeholder workshop held in March of 2014 in Virden revisited a basin approach and gathered consensus on next steps. The consensus view was to develop an organization that would transcend provincial and state boundaries and engage stakeholders from all levels of governments, non-profit organizations, agricultural groups, the business community, and citizens at large.

The building process proceeded with many miles travelled, many meetings, and a large tent open for everyone to become engaged. The first annual Basin-wide conference was hosted in Regina in 2014. There was broad participation from municipal, provincial, state and federal governments, non-profit organizations, agricultural groups, business representatives, and citizens at large. The Planning Committee became the first ARBI Board, and the Interim Executive continued as the ARBI Executive.

The Planning Committee had five main objectives: develop the organization as a functioning charitable entity; establish a base funding structure, begin to secure funding; develop a Basin-wide plan based on attendee's feedback; and assess potential projects that would benefit all citizens in the Basin.

The second annual conference was hosted in Brandon in 2015. This conference affirmed the direction and organizational development work that the Board had undertaken the previous year, and provided direction from stakeholders on the next steps.

One of the key activities going forward was the development of a consensus-driven vision for the future of the Basin that was to include goals, objectives and desired outcomes. That effort has led to this document, the *Assiniboine River Basin Framework for Watershed Stewardship*. Built on Basin-wide input from stakeholders at the grass-roots, agency, and organizational levels, this document identifies key issues of concern and pathways to cooperative solutions. The framework has been constantly adjusted by stakeholders at meetings and the annual conferences in 2015 and 2016, all with the goal of achieving a broad consensus on concrete steps that would enhance resilience and sustainability in the Basin.

Executive Summary

The Assiniboine River Basin Framework for Water Stewardship (Framework)

The *Assiniboine River Basin Framework for Water Stewardship* (Framework) has been developed by the Assiniboine River Basin Initiative (ARBI). The document has been refined through ongoing interactions with the ARBI stakeholder base through workshops, three annual conferences (2014-2016), one-on-one meetings, surveys, small group discussions, and individual feedback. Looking forward, the Framework is intended to be a living document that will guide and enable ARBI and others to act, individually or in partnership, toward a shared vision for the Basin.

The ARBI Vision and Mission statements and guiding principles are the core elements that underpin the development of the goals, objectives, and desired outcomes in the Framework:

ARBI Vision Statement:

A resilient Assiniboine River Basin (Basin), where stakeholders work together to achieve Basin-wide comprehensive integrated watershed actions that will benefit current and future generations.

ARBI Mission Statement:

To create a resilient Assiniboine River Basin, where all residents can adapt to change and achieve environmental, social and economic sustainability through collaborative actions across the Basin.

ARBI Guiding Principles:

1. Define the Basin as the watersheds of the Qu'Appelle, Souris, and Assiniboine Rivers.
2. Seek equitable and fair solutions for all stakeholder constituencies across the entire Basin.
3. Balance current needs with future generational needs.
4. Realize that change is occurring and adaptation is necessary.
5. Work across jurisdictional boundaries (Manitoba, North Dakota, Saskatchewan; Canada and the United States) to develop Basin-wide strategies for the good of the whole Basin.
6. Work collaboratively with all stakeholders (government, nongovernment, business, organizations, etc.) in Saskatchewan, North Dakota and Manitoba in the Assiniboine River Basin.
7. Acknowledge, and take actions that complement the statutory and regulatory responsibilities of the federal, provincial, state, local, and trans-boundary jurisdictions in the Assiniboine River Basin.
8. Approaches to issues will be based on using all available information and sound science.

Framework Key Strategies:

A fundamental component of the Framework is the establishment of Key Strategies – the basic tools and methods that will lead to success in the Basin.

Key Strategies:

1. Trans-Boundary: Information, Communication, Education and Cooperation
2. Science, Research and Technology
3. Sustainable Development and Resiliency

Framework Goals, Objectives and Desired Outcomes

Working within above framework, the Framework articulates four major goals, under which objectives and desired outcomes are established:

GOAL #1: To Increase Stakeholder Understanding of the Basin.

This goal has one objective: to create a *State of the Basin Report* that captures past, present, and future conditions in the Basin, to provide stakeholders with a broad-based perspective of the Basin.

Objective #1: To better understand the following Basin conditions:

- Natural conditions, natural variability, and extreme events;
- Anthropogenic influence, and extreme events since European settlement;
- Predicted impacts of climate change: inventory, resources, assets, liabilities.

GOAL #2: To Increase Basin-wide Stakeholder Decision Making Capabilities.

This goal has three objectives, all related to the increased collection and availability of data, and the development of models and other decision making tools that can be applied at any scale, from local to Basin.

Objective #1: To increase collection and availability of data.

Objective #2: To have relevant model outputs available for stakeholder decision making.

Objective #3: To develop and use decision-support tools at the Basin and sub-watershed planning levels.

GOAL #3: To Create a More Resilient Basin Respecting Water Issues.

This goal has four objectives that focus on the need for a strategy for more effective and integrated jurisdictional water management that relates to water quantity and water quality issues with increased awareness of the importance and value of water.

Objective #1: To develop a Basin strategy for more effective and integrated jurisdictional water management.

Objective #2: To develop Basin strategies for water quantity.

Objective #3: To develop Basin strategies for water quality.

Objective #4: To increase knowledge and awareness of the value of water.

GOAL #4: To Create a More Resilient Basin Respecting Land Issues.

This goal has three objectives, all focused on the need for Basin-wide understanding and dialogue on land issues, and an increased awareness of jurisdictional constraints.

Objective #1: **To develop a Basin strategy for addressing land use issues, based on jurisdictional approaches.**

Objective #2: **To create opportunities for Basin dialogue on key land and water issues.**

Objective #3: **To create a Basin document that fosters a better understanding of land use issues.**

The above goals and objectives have numerous desired outcomes that can potentially be achieved by agencies, groups, organizations, and individuals around the Basin. Simply put, the vision for the Basin will be achieved by: trans-boundary information, communication, education, and cooperation; science, research, and technology; and sustainable development and resiliency principles and actions outlined in the Framework.

The Framework will provide the means to measure progress being made through the actions of many partners across the Basin. It will also guide the development of ARBI work plans, and will be a fundamental yardstick to measure ARBI effectiveness.

I. INTRODUCTION – THE ASSINIBOINE RIVER BASIN INITIATIVE

A. WHAT IS ARBI?

The Assiniboine River Basin Initiative (ARBI) is made up of citizens and organizations that are dedicated to a sustainable and resilient Assiniboine River Basin.

The Assiniboine River Basin (Basin) includes the Qu'Appelle, Souris and Assiniboine Rivers in Canada and the United States and encompasses parts of Manitoba, North Dakota, and Saskatchewan.

ARBI Vision Statement: A resilient Assiniboine River Basin, where stakeholders work together to achieve Basin-wide comprehensive integrated watershed actions that will benefit current and future generations.

ARBI Mission Statement: To create a resilient Assiniboine River Basin, where all residents can adapt to change and achieve environmental, social and economic sustainability through collaborative actions across the Basin.

B. WHO MAKES UP ARBI?

ARBI stakeholders include: citizens; local governments; provincial and state governments; businesses/industry; non-governmental organizations; local groups such as agricultural organizations and cottager associations; and any other groups/organizations that wish to help shape the future direction in the Basin through cooperation and collaboration.

C. CORE VALUES

The Core Values (Appendix I) were used by the ARBI Board in the development of the ARBI Vision and Mission Statements and Guiding Principles, listed below.

D. ARBI GUIDING PRINCIPLES

1. Define the Basin as the watersheds of the Qu'Appelle, Souris, and Assiniboine Rivers.
2. Seek equitable solutions for all stakeholder constituencies across the entire Basin.
3. Balance current needs with future generational needs.
4. Realize that change is occurring and adaptation is necessary.
5. Work across jurisdictional boundaries (Manitoba, North Dakota, Saskatchewan; Canada and the United States) to develop Basin-wide strategies.
6. Work collaboratively with all stakeholders (government, nongovernment, business, organizations, etc.) in Saskatchewan, North Dakota and Manitoba in the Assiniboine River Basin.
7. Acknowledge, and take actions that complement the statutory and regulatory responsibilities of the federal, provincial, state, local, and trans-boundary jurisdictions in the Assiniboine River Basin.
8. Approaches to issues will be based on using all available information and sound science.

II. *ASSINIBOINE RIVER BASIN FRAMEWORK FOR WATERSHED STEWARDSHIP*

A. WHAT IS THE *ASSINIBOINE RIVER BASIN FRAMEWORK FOR WATERSHED STEWARDSHIP*?

The *Assiniboine River Basin Framework for Watershed Stewardship* identifies key issues of importance to stakeholders across the Basin. It recognizes that those issues are expressed across multiple jurisdictions in two Canadian provinces and one American state. Approaches to these issues have been shaped by the core values of these stakeholders. This document articulates Goals, Objectives, and Expected Outcomes for the Basin, in order to achieve the future that stakeholders envision. The FRAMEWORK will be updated by ARBI as the needs and wishes of stakeholders evolve.

B. WHO GUIDES THE DEVELOPMENT THE *ASSINIBOINE RIVER BASIN FRAMEWORK FOR WATERSHED STEWARDSHIP*?

The cornerstone of this initial document is stakeholder input on the key issues using small group discussion and feedback. This feedback has been gathered at meetings and conferences attended by Basin-wide stakeholders. This input began in 2013 with feedback gathered at the inaugural meeting. It continued at the March 2014 ARBI workshop and ARBI annual conferences (2014-16). Input was also received from issues forms circulated to Basin stakeholders in 2015 and 2016 and from select outreach meetings with key stakeholder groups in 2015-2016.

This document is intended to be a living document that is continually updated with new information and needs in the Basin, as well as edits based on achievements in the goals, objectives, and desired outcomes. Input has been, and will continue to be, received from Basin stakeholders at annual conferences and other events.

C. WHO PROVIDED INPUT INTO THE *ASSINIBOINE RIVER BASIN FRAMEWORK FOR WATERSHED STEWARDSHIP*?

Input has been gathered from many sources: grassroots citizens; local, provincial, and state agencies; non-governmental organizations; businesses; agricultural industries; oil and gas producers; cottager associations; and other stakeholders in the Basin whose lives are impacted by natural and human events and actions (see Appendix I).

D. HOW WILL THE *ASSINIBOINE RIVER BASIN FRAMEWORK FOR WATERSHED STEWARDSHIP* BE USED?

1. To identify issues of importance to Basin residents.
2. To guide Basin-wide desired outcomes for the future.
3. To provide direction to ARBI on Basin issues and solutions.
4. To direct and guide the annual ARBI work-plan.
5. To provide a means of tracking progress toward Basin-wide goals.
6. To provide a method to document and celebrate successes achieved by any agency or group that relate to the Framework.
7. To be a living document to guide Basin-wide efforts that ARBI will continually update and revise.

E. HOW WILL THE *ASSINIBOINE RIVER BASIN FRAMEWORK FOR WATERSHED STEWARDSHIP* BE UPDATED?

The *Assiniboine River Basin Framework for Watershed Stewardship* document will be continually updated through annual ARBI work plan, annual conferences stakeholder input, ongoing mailings, and outreach meetings at the local level for additional input.

F. WHAT CAN YOU DO TO HELP?

1. Attend and provide input at each ARBI annual summit conference.
2. Support ARBI efforts and work plan.
3. Implement actions in the *Assiniboine River Basin Framework for Watershed Stewardship* that fit within your mandates to help achieve Basin-wide goals.
4. Communicate your successful efforts to achieve actions in harmony with *the Assiniboine River Basin Framework for Watershed Stewardship*, so others can learn from you and applaud your efforts.

III. KEY STRATEGIES

The key strategies are the tools and methods that ARBI and others will use to address the goals, objectives, and desired outcomes in the Basin. The key strategies will be used at a Basin level when possible. The key strategies are areas of activity that are based on the core values (see Appendix) that stakeholders have identified and the ARBI board has used in developing ARBI.

A. TRANS-BOUNDARY: INFORMATION, COMMUNICATION, EDUCATION AND COOPERATION

1. NEEDS:

- **a.** A clearinghouse to assist Basin stakeholders in finding and sharing information.
- **b.** Improved communication between jurisdictions and among stakeholders.
- **c.** Connect information to the grassroots level.
- **d.** Educate and update all generations on key Basin issues and projects.
- **e.** Elevate water management to a higher priority
- **f.** Drive behavioral changes.
- **g.** Communicate key messages back to all ARBI constituencies.
- **h.** Provide more background knowledge on ARBI to the Basin.
- **i.** Continually identify topics of interest.
- **j.** Harmonious and uniform policies and programs across the Basin related to: regulations; zoning; planning; forecasting; integrated flood/drought plans; uniform risk mitigation; shared long term vision; mechanisms for communication; and Basin land and water metrics and progress indicators.
- **k.** Harmonious jurisdictional goals that are supported at the federal level.
- **l.** A Basin-wide approach that is proactive not reactive, that optimizes investments, and that considers Basin-wide governance opportunities.

2. **HOW NEEDS CAN BE MET**
   a. Develop communication and awareness materials: newsletters; flyers; brochures; white papers; reports; web site; etc.
   b. Provide opportunities to learn, interact, and to provide input: annual conference; workshops for training/learning; workshops for dialogue, input, and consensus; symposiums; etc.
   c. Arrangements with partners to share databases and publications.
   d. Prepare *State of the Basin* reports that will provide a current snapshot on issues specific to select goals, objectives, or desired outcomes.
   e. Assist trans-boundary cooperation through: workshops; outreach; meetings; and conferences by facilitation; education; and dialogue.
   f. Communication and education to inform and explain the respective roles of governments, First Nations, and organizations.
   g. Use ARBI to promote trans-boundary cooperation.

B. USE SCIENCE, RESEARCH AND TECHNOLOGY

1. **NEEDS:**
   a. Increase investment in science, research and technology.
   b. Improve the science base for public policy development and decision making.
   c. The collection, development, and use of data/technology to optimize water and land management.

2. **HOW NEEDS CAN BE MET:**
   a. Assist in science and research needs by: identifying gaps in science for decision making; advocating for increased funding for science and research needs; working towards the greater use of science in setting policy and managing resources; science for entire Basin; and communicating the Basin's science base more effectively to broad audiences.
   b. Hold a science symposium as part of the annual conference to inform stakeholders about research from other Basin organizations.

C. SUSTAINABLE DEVELOPMENT AND RESILIENCY

1. **NEEDS:**
   a. A uniform and fair approach to balancing the economy and the environment.
   b. The protection and improvement of wetlands, ecosystem health, biodiversity, fish, and wildlife through applied best management practices and incentive opportunities for landowners.

2. **HOW NEEDS CAN BE MET:**
   a. Adopt sustainable development and resiliency as concepts that undergird the vision, mission, and activities of ARBI, and the *Assiniboine River Basin Framework for Watershed Resiliency* document.

      i. **Sustainable Development Definition: Balance between economic, environment, and community needs in decision-making.**

      ii. **Resiliency Definition: The capacity of the basin to maintain desired processes, outputs, and services in the face of a fluctuating environment and human use.**

      iii. **Stewardship Definition: Using land and water resources in a manner that leaves these resources in as good or better condition for future users.**

IV. BASIN GOALS, OBJECTIVES AND DESIRED OUTCOMES

Through extensive stakeholder input at workshops and conferences, and through questionnaires and other methods, key land and water issues have been identified for the Basin. From this feedback, Basin-wide goals, objectives, and desired outcomes have been developed. These desired outcomes will shape and guide the ARBI annual work plan. The desired outcomes will also encourage others to focus their activities in specific areas, and to act to benefit the larger Basin as they carry out their specific charges and mandates, and provide a measure against which their actions can be assessed against Basin goals. The desired outcomes will assist ARBI in promoting activities that provide Basin-wide benefits.

A. GOAL #1: TO INCREASE STAKEHOLDER UNDERSTANDING OF THE BASIN.

1. **Objective: To better understand the following Basin conditions:**

   - Natural conditions, natural variability, and extreme events;
   - Anthropogenic influence, and extreme events since European settlement;
   - Predicted impacts of climate change: inventory, resources, assets, liabilities.

   a. Desired Outcome #1: Prepare a *State of the Basin* document that speaks to the subjects listed above.

   b. Desired Outcome #2: Education and outreach activities.

B. GOAL #2: TO INCREASE BASIN-WIDE STAKEHOLDER DECISION MAKING CAPABILITIES.

1. **Objective #1: To increase collection and availability of data.**

   a. Desired Outcome #1: LiDAR collection across the Basin in MB, ND, and SK.

   b. Desired Outcome #2: Completed water conveyance infrastructure inventory (culverts, bridges, rock, etc.) across the Basin in MB, ND, and SK.

   c. Desired Outcome #3: Uniform and adequate collection of meteorological and hydrometric data across the Basin.

2. **Objective #2: To have relevant model outputs available for stakeholder decision making.**

   a. Desired Outcome #1: Development of Basin-wide hydrologic assessment capabilities for decision making established through the Aquanty Project.

   b. Desired Outcome #2: Development of hydrologic models for sub-areas with acute water problems.

3. **Objective #3: To develop and use decision-support tools at the Basin and sub-watershed planning levels.**

   a. Desired Outcome #1: The development of models for water quantity and quality, and evaluation of "What If" scenarios to create more effective action plans in the Basin.

   b. Desired Outcome #2: The development of predictive climate models in the Basin.

C. GOAL #3: TO CREATE A MORE RESILIENT BASIN RE: WATER ISSUES.

1. **Objective #1: To develop a Basin strategy for more effective and integrated jurisdictional water management.**

   a. Desired Outcome #1: Effective Basin-wide dialogue with local, provincial, state, federal governments, and other entities in the Basin.

   b. Desired Outcome #2: Movement toward uniform policy and decision-making processes across jurisdictions, to facilitate inter-jurisdictional water management in the Basin.

      i. Desired Outcome #2a: Dialogue that increases integration of water management across jurisdictions.
      ii. Desired Outcome #2b: A Basin coordinated approach for sustainable drainage.
      iii. Desired Outcome #2c: A coordinated approach for water retention and releases across the Basin.

iv. Desired Outcome #2d: Movement toward common jurisdictional rules that apply to all people in the Basin.

c. Desired Outcome #3: Effective flood and drought mitigation strategies at the local, provincial, state, and federal levels.

d. Desired Outcome #4: Release the *Assiniboine River Basin Framework for Watershed Stewardship*.

i. Desired Outcome #4a: A common Basin vision that all can work toward.
ii. Desired Outcome #4b: Update the *Assiniboine River Basin Framework for Watershed Stewardship* as required.

2. Objective #2: To develop Basin strategies for water quantity.

a. Desired Outcome #1: Development of a Basin Inventory of retention/detention storage and control operations.

b. Desired Outcome #2: Inclusive approach to increasing water storage capacity for flood control and mitigation.

i. Desired Outcome #2a: Decrease in spring water levels that cause devastation to property, infrastructure, and the environment.

c. Desired Outcome #3: Increase opportunities for more storage for water supply.

i. Desired Outcome #3a: Preparedness for extended drought periods that will sustain economic activity and reduce economic loss.
ii. Desired Outcome #3b: Preparedness for adequate water supply for a growing economy and increased population throughout the Basin.
iii. Desired Outcome #3c: Sufficient water storage (dams, ponds, wetlands, etc.) across the watershed to help mitigate major floods and provide supplies during droughts.
iv. Desired Outcome #3d: Agreements among users and stakeholders to reduce conflict between economic, environmental, and social uses of these retained waters.

d. Desired Outcome #4: Increased storage opportunities for irrigation.

e. Desired Outcome #5: Increased opportunities for multipurpose storage that will also benefit nutrient load reduction.

f. Desired Outcome #6: Increased storage opportunities for habitat.

g. Desired Outcome #7: A distributed storage strategy developed across the Basin.

3. **Objective #3: To develop Basin strategies for water quality.**

   a. Desired Outcome #1: A Basin-wide jurisdictional approach on water quality condition and stressors in the Basin.

   b. Desired Outcome #2: A Basin-wide jurisdictional approach that identifies the nutrient loads and the impacts from urban and agriculture areas on nutrient loads across the Basin.

   c. Desired Outcome #3: A Basin-wide monitoring system with provincial, state, and federal participation.

   d. Desired Outcome #4: Increased funding at all levels in the Basin to reduce pollution, increase biodiversity, and reduce floods to improve water quality.

   e. Desired Outcome #5: A Basin-wide effort to revise the standards on waste water treatment.

   f. Desired Outcome #6: Development of a *State of the Basin Water Quality Report* with the ISRB and jurisdictional input.

      i. Desired Outcome 6a: Development of recommendations from the *State of the Basin: Basin Water Quality Report*.

4. **Objective #4: To increase knowledge and awareness of the value of water.**

   a. Desired Outcome #1: Development of a *State of the Basin Economic Report* that includes economic impacts caused by anthropogenic and extreme events in the Basin, highlighting the value of water as it relates to federal and provincial programs and incentives.

      i. Desired Outcome #1a: Development of recommendations from the *State of the Basin Economic Report*.
      ii. Desired Outcome #2a: Development of Basin-wide and jurisdictional recommendations related to Basin hydrology needs, gaps, and uniform approaches.

D. **GOAL #4: TO CREATE A MORE RESILIENT BASIN RESPECTING LAND ISSUES.**

1. **Objective #1: To develop a Basin strategy for addressing land use issues, based on jurisdictional approaches.**

   a. Desired Outcome #1: Basin-wide workshops for dialogue on conflicting land uses and the development of Basin strategies and recommendations that include funding and programs to reduce conflict.

b. Desired Outcome #2: A Basin-wide bank erosion inventory with local and provincial/state input into strategies to address the problem and to prioritize restoration.

c. Desired Outcome #3: Basin-wide efforts connected to federal, provincial, and state agencies that reach out to local stakeholders to identify program gaps and needs for ecological goods and services programs across the Basin.

   i. Desired Outcome #3a: Opportunities for stakeholders to learn about and access these programs through education, workshops, conferences, and outreach.
   ii. Desired Outcome #3b: Basin strategies at the federal, provincial, and state levels to provide adequate funding to land managers for ecological goods and services.

d. Desired Outcome #4: Basin-wide efforts to develop public policies for sensitive wildlife habitats as part of an overall approach for dealing with invasive species, nutrient transport, flood mitigation, and natural habitat improvement.

e. Desired Outcome #5: Increased understanding of the impacts of the loss of soil organic matter, especially its relationship to a watershed's capacity for water absorption and preventing nutrient leaching from soil into water.

f. Desired Outcome #6: Increase the structural ability of the soil to hold water.

2. **Objective #2: To create opportunities for Basin dialogue on key land and water issues.**
   a. Desired Outcome #1: Opportunities for dialogue and education on management and issues related to: diversions; dams; closed basins; water quality; and drought.
   b. Desired Outcome #2: Improved awareness of the importance of water retention on the land leading to more dialogue, planning, and funding for dams and retention sites to hold water.
   c. Desired Outcome #3: Greater understanding across government departments and agencies of the need to take a "whole of government" approach to dealing with drainage and flood mitigation efforts.

3. **Objective #3: To create a Basin document that fosters a better understanding of land use issues.**
   a. Desired Outcome #1: Increased education, workshops, conferences, and outreach presentations on basin watershed and sub-watershed details, and Basin topography, geography, and hydrology throughout the Basin.

V. CONCLUSION

A considerable amount of work has occurred to date since the first workshop in March 2014. This workshop, as well as the 2014, 2015, and 2016 annual ARBI conferences generated a tremendous amount of discussion on the future direction of ARBI. This feedback from a broad representation of

Basin stakeholders has been woven into the current *Assiniboine River Basin Framework for Watershed Stewardship* document.

Opportunities for feedback in the future will be provided at outreach meetings during the year and at the ARBI annual conference. Relevant new information and stakeholder perspectives will be integrated into the Framework through open processes at future ARBI conferences.

The Framework is intended to be a living document that will guide ARBI activities and, more broadly, provide a means to measure and celebrate results that any person, group, or agency might be able to achieve in the Basin that contributes to sustainability and resilience. Collective and cooperative action by all is needed to create the future that our children deserve.

VI. APPENDICES

APPENDIX I

ARBI CORE VALUES

The Core Values have been used by the board to develop ARBI and the supporting Vison, Mission, and Guiding Principles documents. Feedback was received from early leaders in the effort and from participants at the Virden, MB workshop the March 2014 and the first annual conference in November of 2014. These core values will also guide and shape the issues focus in the Assiniboine River Basin-Coordinated Action Plan and the annual work-plan of ARBI.

Basin-Wide (Systems) Approach

- Focus on the Basin, physical size, complexity, Water flows travels between jurisdictions, water does not see political boundary. (ARBI has been formed to do this) aim for a direction and align people. Align industry. Balance priorities. Enforce policies. Lack of Basin-wide mgmt. Fractured or unclear decision making processes. Accountability and measurement. Respect differences and commitments within Basin, apolitical, farmland / wetland balance, agricultural productivity - global demand, risk of losing farms / farmers, equal say, hear smaller community voices, cottager's voices, help each other, rural and urban, protect infrastructure.

Be More Proactive (not reactive)

- Focus on risk mitigation and prevention of damage (instead of reacting to catastrophe).

Encourage Team Work

- We are all in this together. Give us hope. More action (less talking).

Enable "Balanced" Decisions

- Issues and problems are interrelated.

Improve Communication

- Across jurisdictions and between various stakeholders and government in a consistent and frequent manner.

Cross Jurisdictions

- Water does not know jurisdictional boundaries. Ensure full basin representation, , approach industry water users and invite them to participate, consult directly with missing organizations, add other groups - federal wildlife agency, first nations, more

intimate stakeholder engagement, include more Saskatchewan RM's, industry - potash, oil and gas, mining, transportation, food processing - rail, trucking, irrigation groups, urban and rural, watershed organizations, academia, Saskatchewan government, First Nations, not just a rural - urban needs to be at the table too.

Invite Science

- Focus on fact based decision making.

More Effective Management

- Align management tools, less talk and more action, accomplish something tangible but minimize admin. costs. One-stop shop for water management. Set manageable goals, define needs and communicate, organizational needs, look at it top down and bottom up (grassroots), define structure options/pros and cons, purpose, define leadership strategy, priorities, needs, mission statement, goals and objectives. Define problem statement, bring forward ideas and solutions, work from a plan, prioritize issues, activities, keep the momentum, maintain continuity, short term focus, long term vision, incentives, identify lead org., develop a leadership role and model.

Expand Stakeholder Base and Strength

- There are similar organizations within different jurisdictions. Bring them together to share common issues and solutions. Bring provincial and state governments and stakeholders together - create a safe environment for collaborative problem solving. Expand stakeholder base to include all who are affected by water challenges - even those outside the Basin. There is strength in numbers and need to get local support.

KEY BASIN ISSUES

Small Group Feedback from November 2015 conference (five small groups) was gathered and was incorporated in to the draft document under the various areas as noted by the groups.

Land Related Issues

- Land use conflict. Bank erosion, nutrient leaching. Understanding land use changes.

Water Architecture (Evaluation of various types of infrastructure)

- Levels and flooding on lakes and river systems, swamps, man-made structures (dams, diversions) and decision making process to operate, connecting head waters, potholes, etc. ii. Architecture - Storage (distributed), execution, reduce use of portage diversion (nutrient load), water retention, and smaller dams.
- Architecture - Land issues, watershed details, dams, overview of hydrology.
- Architecture - Define Basin topography, geography, and hydrology.

Mother Nature's Challenges (Extreme Events--- Resiliency)

- Floods, Flood management, Drought, Aquifer capacity, watershed protection and sustainability, invasive species, quantity and quality.

Man Made Challenges (Extreme Events--- Resiliency)

- Drainage, Storage, Irrigation, water quality, nutrient loading, eutrophication, water quality, pollution, public health, recreation, what crosses the jurisdictional boundaries.

Water Management (more effective, integrated, jurisdictional water management)

- Riverbank authority, land buyout, incentives to land owners, integrated water management system, set rules people will follow, accountability, take nature's force into account, adapt to change, common voice / common plan, better coordination, use water efficiently, promote a healthy Basin, wiser multi-objective development, execution, long term management, leadership, measure and deliver results, a well-managed watershed that meets the demands and needs of residents and leads to a flourishing economy, eliminate political boundaries, proactive not reactive, prevention, CFI would be a good model, deliver goals, synergy - whole is greater than the sum of the parts, balanced decisions, vision, able to deal with extreme weather, sustainable.

Water Storage

- Storage, controlled release, coordinate existing structures, drainage outflow *vs storage.*

Flood Control

- Storage, more flood controls, structures, Basin strategy for floods, flood mitigation strategy, shift irrigation to surface.

Water Value

- Need to put a value on Water, water is a valuable resource.

Water Quantity and Retention

- Excessive water levels in spring devastate property and cause massive infrastructure & environmental damage. Drought periods lead to restricted economic activity and economic loss. A growing economy in the watershed will place more demand upon existing supply. Water storage (dams, ponds, marshland, etc.) across the watershed need to be sufficient to help mitigate major floods and provide resources during droughts. Conflict between economic, environmental and social uses of these retained waters need to be identified and addressed for the benefit of all watershed users.

Water Quality

- Urban areas are significant contributors to the nutrient load across the watershed; farm-based nutrients are being lost; both are contributing to eutrophication of lakes throughout the drainage Basin (Lake of the Prairies, the Qu'Appelle Valley Lakes, Rafferty, etc.), and ultimately into Lake Winnipeg.
- Water Quality - Quality is critical, look at industry, agriculture, wildlife, environment, recreation. Effluent release, monitoring, nutrient management plans, need funding, reduce pollution, biodiversity, floods impact quality.

APPENDIX II

AGENCIES AND ORGANIZATIONS IN THE BASIN THAT HAVE BEEN INVOLVED WITH ARBI

FEDERAL

- Agriculture & Agri-Food Canada (AAFC)
- International Joint Commission (IJC)
- International Souris River Board (ISRB)

MANITOBA

5. *Manitoba Agencies*

- Manitoba Agriculture (MA)
- Manitoba Infrastructure (MI)
- Manitoba Sustainable Development (MSD)
- Association of Manitoba Municipalities (AMM)

Manitoba Conservation Districts

- Manitoba Conservation District Association (MCDA)
- Assiniboine Hills (AHCD)
- Lake of the Prairies (LPCD)
- LaSalle Redboine (LSRBCD)
- Upper Assiniboine River (UARCD)
- West Souris River (WSRCD)
- Turtle Mountain (TMCD)
- Little Saskatchewan River (LSRCD)

Manitoba Commodity Groups

- Keystone Agricultural Producers (KAP)
- Manitoba Beef Producers (MBP)
- Manitoba Forage & Grassland Association (MFGA)

Manitoba NGOs

- Lake Winnipeg Foundation (LWF)
- International Institute of Sustainable Development (IISD)
- Manitoba Habitat Heritage Corporation (MHHC)
- Ducks Unlimited Canada (DUC)

Manitoba Universities

- Assiniboine Community College (ACC)
- Brandon University (BU)
- University of Manitoba (U of M)
- University of Winnipeg (U of W)

NORTH DAKOTA

6. North Dakota Agencies

- North Dakota Department of Agriculture (NDA)
- North Dakota Department of Health (NDH)
- North Dakota Game and Fish (NDGF)
- North Dakota State Water Commission (NDSWC)

North Dakota NGOs

- Souris River Joint Board (SRJB)

North Dakota Universities

- North Dakota State University (NDSU)
- Minot State University (MSU)
- University of North Dakota (UND)

SASKATCHEWAN

7. Saskatchewan Agencies

- Water Security Agency (WSA)
- Saskatchewan Association of Urban Municipalities (SUMA)
- Saskatchewan Association of Rural Municipalities (SARM)

8. Saskatchewan Watershed Associations

- Saskatchewan Association of Watersheds (SAW)
- Assiniboine Watershed Stewardship Association (AWSA)
- Lower Souris River Watershed Stewards (LSRWS)
- Moose Jaw River Watershed Stewards (MJWS)
- Wascana Upper Qu'Appelle Watersheds Taking Responsibility (WUQWTR)
- Lower Qu'Appelle River Watershed Stewards (LQRWS)
- Upper Souris Watershed Stewards (USWS)

Saskatchewan Commodity Groups

- Agricultural Producers Association of Saskatchewan (APAS)

Saskatchewan NGOs

- Ducks Unlimited Canada (DUC)
- Saskatchewan Conservation & Development Agency (SCDA)
- Saskatchewan Farm Stewardship Association (SFSA)

>>><<<

North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
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Agenda #1)

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer/Secretary
SUBJECT: NDSWC Cost-Share Request – City of Lisbon
Permanent Flood Protection Phase I - Levee F Construction
DATE: May 25, 2017

In their correspondence dated May 2, 2017, the City of Lisbon (City) requested cost share assistance for their Permanent Flood Protection Phase I - Levee F Construction project.

This project is for the fifth levee in the City's Sheyenne River Permanent Flood Protection Phase I – Project. Levee F will include approximately 650 lineal feet of flood protection. The project will be constructed on the west side of the Sheyenne River. The proposed project will include concrete and removable floodwalls. This levee will help to protect homes as well as important City infrastructure. A construction permit has been applied for.

In 2014, the City began construction of Phase I – Levee A. In 2015, the City began construction of Phase I – Levee C. In 2016, the City began construction of Phase I – Levee E. Levee D was approved for cost share on March 29, 2017 and is anticipated to begin construction this summer.

The estimated total cost of the Permanent Flood Protection Levee F Construction is $4,750,000, which is eligible for state cost-share assistance as a flood control project at 60 percent. However, just as with the City's Phase I – Levee A, Levee C, Levee E and Levee D projects, the city is requesting a deviation from policy in the form of an additional 20 percent for a total cost share of 80 percent of construction costs or $3,800,000, due to what they feel is an increased flood risk from the operation of the Devils Lake Outlets,

I recommend the State Water Commission approve this request by the City of Lisbon for state cost participation in the Sheyenne River Permanent Flood Protection Phase I – Levee F Construction, at an amount not to exceed $3,800,000 in state funds. This cost share participation is based on the policy of 60 percent cost share for flood control, plus 20 percent to mitigate the additional flood risk from the Devils Lake Outlets. This approval is subject to the entire contents of the recommendation contained herein, obtaining all applicable permits and the availability of funds.

GE:BN:ph/1991-10

The City of Lisbon

423 MAIN STREET • PO BOX 1079
LISBON, NORTH DAKOTA 58054

May 1, 2017

Garland Erbele, P.E.
State Engineer
North Dakota State Water Commission
900 East Boulevard Avenue, Dept. 770
Bismarck, North Dakota 58105-0850

Copy via email: Original US Mail

Subject: City of Lisbon Request for
Sheyenne River Flood Protection
Levee F

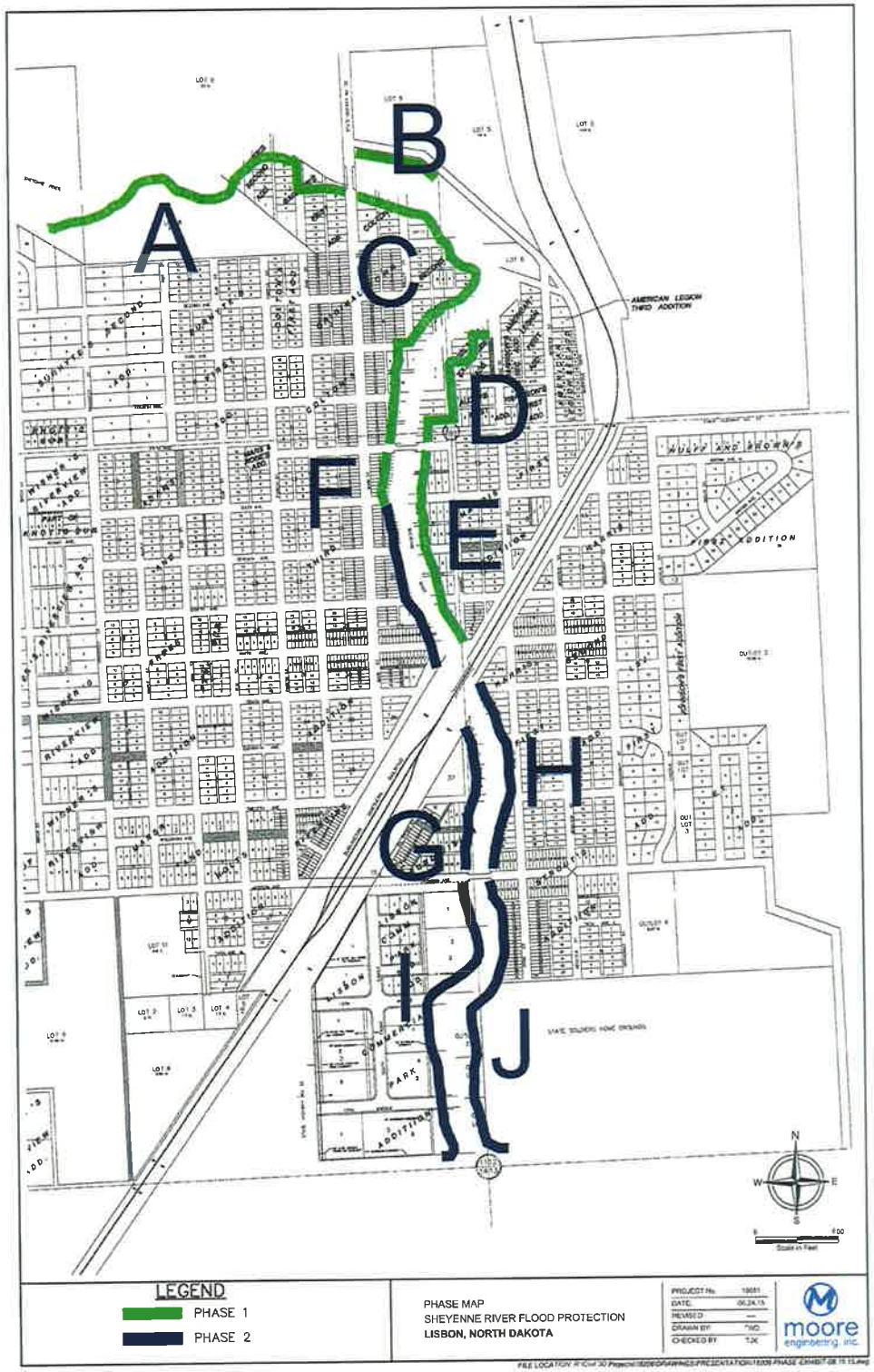
The City of Lisbon is requesting State Water Commission funding for 650 linear feet of permanent flood protection construction for the City of Lisbon's Sheyenne River Flood Protection Project. It is our intent to bid and construct Levee F of our flood protection project, as shown in the attached preliminary plans and specifications.

Our City Engineer has provided a detailed opinion of cost for the project, see attached documents. We would like to advertise the project for bids and would like to request funds for $4,750,000 in order to construct Levee F. We are requesting funding on this project for eligible Constructions Costs including Construction Engineering to be 60% cost share from the State Water Commission's policy on flood control, plus 20% cost share from Devils Lake Mitigation funding, with the remaining 20% Local Share funded with a 30 year loan from the State Water Commission at 1.5% interest.

Thank you for your help with our project and funding requests. If additional information is needed please feel free to contact me at (701) 680-0384.

Sincerely,

Tim Meyer
Mayor, City of Lisbon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PHASE 1
PHASE 2
PHASE MAP
SHEYENNE RIVER FLOOD PROTECTION
LISBON, NORTH DAKOTA
PROJECT No. 19051
DATE 06.24.15
REVISED —
DRAWN BY TMD
CHECKED BY TJK
moore engineering, inc.

Project #: 18681
Date Created: 5/1/17

Sheyenne River Flood Protection
Levee F
Lisbon, ND

Preliminary Engineer's Opinion Cost

	BID ITEM NO. & DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
PART 1 - Levee F					
1.	Asphalt - Remove	SY	9000	$8.00	$72,000.00
2.	Unclassified Excavation	CY	1540	$10.00	$15,396.67
3.	Aggregate Surface - Remove	SY	605	$6.00	$3,630.00
4.	Concrete - Remove	SY	915	$12.00	$10,980.00
5.	Curb & Gutter Remove	LF	924	$10.00	$9,240.00
6.	Valley Gutter - Remove	SY	100	$12.00	$1,200.00
7.	Buried Concrete - Remove	CY	100	$25.00	$2,500.00
8.	Water Main - Remove	LF	682	$20.00	$13,640.00
9.	Water Service - Remove	LF	200	$20.00	$4,000.00
10.	Disconnect Water Service at Main	EA	4	$1,250.00	$5,000.00
11.	Gate Valve - Remove	EA	3	$400.00	$1,200.00
12.	Sanitary Sewer Manhole - Remove	EA	4	$1,000.00	$4,000.00
13.	Sanitary Sewer Main - Remove	LF	500	$22.00	$11,000.00
14.	Sanitary Sewer Service - Remove	LF	200	$20.00	$4,000.00
15.	Disconnect Sanitary Service at Main	EA	4	$1,250.00	$5,000.00
16.	Storm Sewer - Remove	LF	2165	$35.00	$75,775.00
17.	Storm Sewer Manhole - Remove	EA	31	$1,000.00	$31,000.00
18.	Culvert - Removal	LF	50	$15.00	$750.00
19.	Exploration Trench	LF	600	$12.00	$7,200.00
20.	Exploration Trench - CDF Fill	CY	50	$150.00	$7,500.00
21.	Exploration Trench - Excess Material - Remove	CY	1500	$8.00	$12,000.00
22.	Exploration Trench - Import	CY	1500	$10.00	$15,000.00
23.	Topsoil - Import	CY	100	$8.00	$800.00
24.	Water Main - Connect to Existing	EA	4	$1,250.00	$5,000.00
25.	Water Main - 6" PVC	LF	650	$50.00	$32,500.00
26.	Water Main - 8" PVC	LF	350	$55.00	$19,250.00
27.	Hydrant Lead - 6" PVC	LF	25	$55.00	$1,375.00
28.	Hydrant - 6"	EA	1	$4,750.00	$4,750.00
29.	Gate Valve & Box - 6"	EA	4	$1,500.00	$6,000.00
30.	Gate Valve & Box - 8"	EA	1	$1,800.00	$1,800.00
31.	Storm Sewer - 12" RCP	LF	705	$50.00	$35,250.00
32.	Storm Sewer - 15" RCP	LF	950	$55.00	$52,250.00
33.	Storm Sewer - 18" RCP	LF	200	$70.00	$14,000.00
34.	Storm Sewer - 24" RCP	LF	1055	$90.00	$94,950.00
35.	Storm Sewer - 30" RCP	LF	250	$100.00	$25,000.00
36.	Storm Sewer - 54" RCP	LF	140	$145.00	$20,300.00
37.	Storm Sewer - 66" RCP	LF	175	$200.00	$35,000.00

moore engineering, inc.

Project #: 18681
Date Created: 5/1/17

Sheyenne River Flood Protection
Levee F
Lisbon, ND

Preliminary Engineer's Opinion Cost

	BID ITEM NO. & DESCRIPTION	*UNIT*	*QUANTITY*	*UNIT PRICE*	*TOTAL*
38.	Storm Sewer - Flared End Section - 66"	EA	1	$1,000.00	$1,000.00
39.	Storm Sewer Manhole - 48"	EA	11	$4,000.00	$44,000.00
40.	Storm Sewer Manhole - 60"	EA	3	$6,500.00	$19,500.00
41.	Storm Sewer Manhole - 108"	EA	1	$10,000.00	$10,000.00
42.	Storm Sewer Manhole - 120"	EA	1	$12,000.00	$12,000.00
43.	Storm Sewer Inlet - 2' x 3'	EA	16	$2,500.00	$40,000.00
44.	Storm Sewer Inlet - 30"	EA	1	$1,500.00	$1,500.00
45.	Storm Sewer - T manhole	EA	1	$7,500.00	$7,500.00
46.	Storm Sewer Lift Station	LS	1	$700,000.00	$700,000.00
47.	Storm Sewer Lift Station - Electrical and Controls	LS	1	$55,000.00	$55,000.00
48.	Subgrade Prep	SY	24546	$2.00	$49,092.00
49.	Reinforcement Fabric	SY	24593	$2.00	$49,186.00
50.	Aggregate - NDDOT Class 5 - 6"	SY	400	$6.00	$2,400.00
51.	Aggregate - NDDOT Class 5 - 9"	SY	1400	$8.00	$11,200.00
52.	Aggregate - NDDOT Class 5 - 12"	SY	8250	$10.00	$82,500.00
53.	Curb & Gutter	LF	1000	$18.00	$18,000.00
54.	Concrete Valley Gutter	SY	100	$75.00	$7,500.00
55.	Asphalt Base Course - 3"	SY	1290	$16.00	$20,640.00
56.	Asphalt Base Course - 5"	SY	7948	$25.00	$198,700.00
57.	Asphalt Wearing Course - 2"	SY	9238	$10.00	$92,380.00
58.	Reinforced Concrete Pavement	SY	200	$75.00	$15,000.00
59.	Sidewalk - 4"	SY	500	$50.00	$25,000.00
60.	Driveway - 6"	SY	100	$60.00	$6,000.00
61.	Detectable Warning Panels	SF	168	$55.00	$9,240.00
62.	Seeding - Hydromulch	SY	1000	$3.00	$3,000.00
63.	Floodwall	LF	575	$1,150.00	$661,250.00
64.	Floodwall Footing	LF	575	$700.00	$402,500.00
65.	Removable Floodwall	LS	1	$225,000.00	$225,000.00
66.	Removable Floodwall Footing	LF	65	$1,250.00	$81,250.00
67.	Construction Site Entrance	EA	2	$2,500.00	$5,000.00
68.	Inlet Protection Device	EA	28	$200.00	$5,600.00
69.	Sediment Control Wattle	LF	500	$3.00	$1,500.00
70.	Stormwater Management	LS	1	$3,000.00	$3,000.00
71.	Testing Allowance	LS	1	$25,000.00	$25,000.00
72.	Traffic Control	LS	1	$25,000.00	$25,000.00
				Total Part 1	$3,575,674.67
				Contingencies	$294,325.33

moore engineering, inc.

Project #: 18681
Date Created: 5/1/17

Sheyenne River Flood Protection
Levee F
Lisbon, ND

Preliminary Engineer's Opinion Cost

BID ITEM NO. & DESCRIPTION	*UNIT*	*QUANTITY*	*UNIT PRICE*	*TOTAL*
			Resident Project Representative	$400,000.00
			Construction Surveys &Staking	$100,000.00
			Construction Engineering	$350,000.00
			Post Construction	$30,000.00
			TOTAL PROJECT COST	$4,750,000.00

North Dakota State Water Commission

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Agenda #1

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer–Secretary
SUBJECT: Federal MR&I Funding - Northeast Regional Water District
DATE: June 1, 2017

Northeast Regional Water District is requesting Federal Municipal, Rural, and Industrial Water Supply (MR&I) funding for a New User Expansion Project of the Langdon Rural Branch to add 200 users in western Cavalier County. The Garrison Diversion Conservancy District will also consider this request on June 8th.

The water supply for the project will be from a pipeline under construction from the city of Devils Lake water treatment plant to the Langdon Rural Branch. The major steps in the development of the expansion project include completing a user sign-up process, feasibility study, meeting the requirements of the National Environmental Policy Act, federal cost-price analysis, and completing plans and specifications for bidding the project. The new estimated cost is $8,000,000, with a 75 percent grant being $6,000,000. Approval allows the project to move forward and to be reimbursed with current and future federal MR&I funding.

I recommend the State Water Commission approve a 75 percent cost share for future reimbursement, not to exceed $6,000,000, to Northeast Regional Water District from Federal MR&I funding. The funding is in the form of a grant towards eligible costs, contingent on available funding, subject to future revisions, and the project follows the federal MR&I program requirements.

GE:JM:ph/237-03NOE

North Dakota State Water Commission

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Agenda #2)

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer–Secretary
SUBJECT: Federal MR&I Funding – Southwest Pipeline Project
DATE: June 7, 2017

The Garrison Diversion Unit budget allocation for the 2017 Federal Municipal, Rural, and Industrial Water Supply (MR&I) funding has not been finalized. This is a request to allocate up to $4,000,000 to the Southwest Pipeline project, which allows the planning and construction process to continue and ensure allocations be used. The major steps in the development of any project include meeting the requirements of the National Environmental Policy Act, federal cost-price analysis, and completing plans and specifications for bidding the project. The Garrison Diversion Conservancy District will also consider this request on June 8th.

I recommend the State Water Commission approve a future reimbursement, not to exceed $4,000,000, to Southwest Pipeline Project from Federal MR&I funding. The funding is in the form of a grant towards eligible costs, contingent on available funding, subject to future revisions, and the project follows the Federal MR&I program requirements.

GE:JM:ph/1736-05

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Agenda #1

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer-Secretary
SUBJECT: Mouse River Enhanced Flood Protection Project Status Report
DATE: May 30, 2017

Permitting:
Comments have been received on the EIS, and they are currently being addressed. This component is on schedule. When the EIS is completed and a favorable Record of Decision is made, processing of the 404 application (fill in wetlands) can proceed. The 408 permit (modification of federal works) has been submitted by the St. Paul District Corps of Engineers to the COE Division office. After review there, it will be submitted to Corps headquarters for final approval. This is expected in September. There are no known issues arising from any of these processes. If this timeline holds, construction contracts could be awarded in September. Although this would allow no major work to be done in 2017, it may be possible to select and mobilize a contractor to the site and perhaps begin some site work this fall.

Feasibility Study:
The St. Paul District is moving ahead with the feasibility study. The next milestone is identification of a "Tentatively Selected Plan". This should occur some time in August. We do not yet know what this plan will look like, however the Corps and the Project are making great efforts to coordinate. The Tentatively Selected Plan (TSP) is what the Corps will evaluate for feasibility. When this is identified we will have a much firmer idea of what they can do and many of the currently unanswerable questions can be addressed.

Design:
The design of the 4th Avenue tieback and the Burlington levees is progressing and is on schedule.

GE:JTF:pdh/1974

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Agenda #2)

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer-Secretary
SUBJECT: Ward County/Minot Acquisitions
DATE: May 30, 2017

According to a recent letter from Ward County (attached), the County's voluntary acquisition effort in the rural areas is drawing to a close. Of the $6,015,347 remaining in the program, the remaining liability is about $700,000. The State's share of this is $525,000.

The County requests that the remaining portion of this funding be made eligible for acquisitions within the corporate limits of the City of Minot. It could be argued that, since Minot is within Ward County, such eligibility already exists, but the County requests the State Water Commission's specific acknowledgement of this. They would like the State Water Commission to expand the acquisition list for Ward County to include the City of Minot's acquisition list.

It should be pointed out that no additional funding is requested.

I recommend the State Water Commission approve use of the acquisition funding already provided to Ward County for acquisitions in Minot and expand the acquisition list in Ward County to include the City of Minot acquisition list.

GE:JTF:pdh/1974
Attachment

WARD COUNTY
1885

Board of Commissioners

John Fjeldahl	Larry Louser	Jim Rostad	Alan Walter	Shelly Weppler
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March 14, 2017

Garland Erbele
North Dakota State Water Commission
900 East Boulevard Avenue, Dept 770
Bismarck, ND 58505-0850

Dear Mr. Erbele

At the November 1, 2016 county commissioners' meeting, Ryan Ackerman updated the commission on the Souris River Joint Board and the different flood mitigation programs. One of the items that came up was the STARR program and the flood acquisition program. Ward County was previously approved for cost share to complete acquisitions within the county related to the Mouse River Plan. While additional acquisitions within the county remain, the County's current voluntary acquisition program is drawing to a close. At present, there is $6,015,347 that remains unspent with about $700,000 in remaining acquisitions under that program. At a 75% cost share, that equates to $525,000 from the State of North Dakota.

At the meeting the commission made a motion to approve the expand the use of the county dollars to include the area within the corporate limits of Minot in addition to the rest of the county. The Ward County Commission would still want to be able to approve the request from the city or SRJB to ensure there are enough funds available to complete the remaining acquisitions in the county but allow the funds previously approved by the State Water Commission for use by Ward County be spent within Ward County. We would like the State Water Commission to expand the acquisition list for Ward County to include the City of Minot's acquisition list.

We would request the $6,015,347 currently obligated and unspent for Ward County acquisitions be made available for acquisitions within the City of Minot pending individual approval by the Ward County Commission.

Sincerely

Ward County Chairman

North Dakota State Water Commission

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MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer - Secretary
SUBJECT: SWPP – Project Update
DATE: May 24, 2017

Oliver, Mercer, North Dunn (OMND) Regional Service Area
Center SA Rural Distribution System 7-9E & 7-9F:
Contract 7-9F has been closed out. Final administrative items remain before final payments can be made to Contract 7-9E.

Contract 7-9G Halliday and Dunn Center Service Area:
This contract includes furnishing and installing approximately 330 miles of 6"-1 ½" ASTM D2241 gasketed joint pipe; 395 services; road crossings; connections to existing pipelines and other related appurtenances. The project is located in Mercer and Dunn Counties of North Dakota. The contract has two Bid Schedules. The State Water Commission (SWC) awarded Bid Schedule 1 to Swanberg Construction, Inc., and Bid Schedule 2 to Northern Improvement Company at its March 11, 2015 meeting.

Bid Schedule 1 consists of furnishing and installing approximately 170 miles of 6" – 1 ½" ASTM D2241 PVC gasketed joint pipe and 173 services. This contract had an intermediate completion date of November 1, 2015 for installation of 37 miles of pipeline and 32 users. Because of the 50 additional users added to Contract 7-9E and removal of intermediate completion date, a new milestone completion date was added to this contract. The milestone completion date was August 1, 2016 for 123 users. The contractor requested a 21-day extension on the milestone completion date because of delays caused by easement problems, permit delays and changes made in the field. The 21-day extension was granted to the contractor. The contractor turned over 123 users on August 27, 2016. Twenty-six change orders have been signed by all parties to date, which added 98 additional users and 47 more miles of pipeline to the contract. The Dakota Access Pipeline (DAPL) crossed at five locations in this contract. A change order was issued to bore the crossings with a minimum of 7-foot separation between the proposed DAPL line and the rural water line and to case the water line with fusible PVC. This change order cost was reimbursed by DAPL through an agreement with Southwest Water Authority (SWA). The substantial completion date including modifications through Change Order No. 27 is June 7, 2018. The contract has two additional intermediate dates November 20, 2016 for the original 173 users and September 27, 2017 for 212 users. To date, the contractor has turned over 254 users. The contractor refused to install a few items added by field orders to the contract. Those items were included in a Change Order to Contract 7-9G Bid Schedule 2. The Bid Schedule 2 contractor agreed to complete those items with their unit price cost and remobilization charges for each location. Pipeline installation on Contract 7-9G Bid Schedule 1 is mostly complete, with installation of service, pressure testing, disinfection, flushing, bacterial testing and reclamation remaining to be completed.

Bid Schedule 2 consists of furnishing and installing approximately 164 miles of 6" – 1 ½" ASTM

D2241 PVC gasketed joint pipe and 218 services. The area is west of Halliday.

Twenty-two change orders have been signed by all parties to date which added 104 additional users and 38 more miles to the contract. The substantial completion date including modifications through Change Order No. 22 is September 18, 2017. The contractor has turned over 315 users.

Contract 5-17 Dunn Center Elevated Reservoir:
This contract includes furnishing and installing a 1,000,000-gallon elevated composite reservoir. The substantial completion date on this contract was August 15, 2014. The tank was turned over for service on August 13, 2015. $260,250 is currently being withheld in liquidated damages for 347 days' delay. We granted a 16-day extension through a change order. The contractor's attorney sent a letter to Bartlett & West indicating that the contractor is willing to pay the actual damages incurred by the Owner. The damage caused by the delay in completion of this tank is the delay in serving the City of Killdeer. We estimated the actual damages to be $212,058.32. This information has been relayed to the contractor's attorney by our legal counsel.

Other Contracts
Contract 8-1A New Hradec Reservoir:
This contract involves furnishing and installing a 296,000-gallon fusion powder coated bolted steel reservoir. Olander Contracting Company is the contractor. The contract documents were executed on May 16, 2013, and the Notice to Proceed was issued on June 3, 2013. The substantial completion date on this contract was September 15, 2013. The tank was put into service on February 20, 2014. The contractor disputes the liquidated damages withheld. The contractor has not provided any justification for the delays. The contractor has filed a lawsuit against us and their tank sub-contractor. Our legal counsel has filed an answer to their lawsuit.

Contract 1-2A Supplemental Raw Water Intake:
The first section of the intake pipe was lowered on July 15, 2015. Through October 31, 2015 tunneling had proceeded to approximately 1786 feet.

In the early morning of November 1, 2015, the contractor's employees heard a loud pop and noticed uncontrolled flow of sand and water entering the pipe approximately 40-50 feet from the caisson end of the pipe. The water and sand flowed out from the pipe and into the caisson shaft, and the employees quickly evacuated the caisson shaft as the water and sand level began to rise.

To remedy the problem, the contractor stabilized the existing pipe to stop the inflow of sand and water with jet grouting. Jet grouting was also completed at the microtunnelling launch zone. Jet grouting is a construction process using high pressure to loosen up the ground and mix it with thin slurry and forming soilcrete columns. The contractor's plan includes a new secondary floor and installing a new intake pipe at a higher elevation. The new intake pipe is proposed to be 12 feet above the center line of the existing installed intake pipe. The new alignment will be rotated 7 degrees to the east from the installed intake alignment. This would result in the intake screen center line to be at 1785 feet compared to 1782 feet originally specified in the Bid Documents. For comparison, the permanent pool elevation for Lake Sakakawea is 1776.3 feet.

The contractor has completed cleaning out the shaft bottom and a plug has been welded on to the installed intake pipe. Approximately 12 feet of lean concrete mix has been poured at the

shaft bottom and the contractor is finishing up grouting the launch zone with micro fine cement grout.

Most of the new pipeline and most of the parts of the new microtunneling boring machine have been delivered to site. In the following weeks, the contractor will install the break out frame, launch seal, jacking frame, head wall and thrust wall. The current schedule from the contractor indicates the new launch date of June 14, 2017.

On February 17, 2017 Bureau of Reclamation (BOR) on behalf of the project submitted an application for a new easement and temporary construction license from US Army Corps of Engineers (Corps). On March 7, 2017 Corps sent a letter to BOR requesting certain documentations regarding after action report, plan for abandonment of the existing MTBM under the lake, plans and specifications of the new pipe and new alignment and the geotechnical analysis completed so far on the project. A meeting with the Corps, BOR, SWC, BW/AECOM and the contractor was held on April 25, 2017 to discuss the items requested in the letter. All the requested information was sent to the Corps on May 12, 2017. The Riverdale Garrison Project office has indicated that their review is mostly complete and partial documents have been transmitted to the Omaha District office for their review.

The contractor has been working with the project's builder's risk insurance policy for reimbursements for the failed project and for rebuilding the intake pipe. The insurance policy has reimbursed the contractor $7,002,500.64 to date. The SWC submitted a claim of $835,000 for the additional engineering expense to the Contract's Builder's Risk Policy. The insurance company responded that the Contract's builder's risk policy has a sublimit of $100,000 for "Architects and Engineers Fee", and that has been already paid to the contractor. The builder's risk insurance company ACE American Insurance Company has filed a lawsuit against the contractor, James W. Fowler Company and the SWC regarding the insurance payouts.

The pipe submittal and the microtunnelling alignment submittal have been reviewed by BW/AECOM and have been incorporated into a proposed change order which is under review by the contractor. A new schedule received from the contractor indicates completion of the project by December 14, 2017. The contractor had requested extension of contract completion to December 14, 2017. A proposed change order that was provided to the contractor before the lawsuit was filed by ACE American Insurance Company included provisions for the contractor seeking reimbursement for additional construction management costs incurred by SWC with the builder's risk policy and also SWC agreeing to execute a future no-cost change order extending the substantial completion date to December 14, 2017 contingent on the contractor achieving the substantial completion by that date. The contractor has verbally indicated that they would assist SWC in seeking reimbursement from the builder's risk insurance policy but however do not want to be held responsible for additional construction management expense for the SWC. So, a new change order only covering the new pipe and microtunneling alignment has been sent to the Contractor for their review. We have indicated to the Contractor that the tunneling along the new alignment cannot commence until the change order is executed and also permission from Corps is obtained regarding the new easement and construction license.

Contract 3-2D Six (6) MGD Water Treatment Plant (WTP) at Dickinson:

The preconstruction conference for Contract 3-2D was held on January 13, 2016 with both the General contractor, John T. Jones Construction Company, Inc., and the Mechanical contractor, Williams Plumbing and Heating, Inc. Bids for Contract 3-2D Electrical Contract were opened on January 28, 2016, and the contract was awarded to Edling Electric, Inc. at the March 3, 2016 meeting.

The General contractor, John T. Jones, has completed all of the basement walls and slabs. The first-floor and second floor cast-in place slabs are complete. The precast wall installation and site piping installation is complete. The installation of roof joists, roof decking, process piping in the basement, equipment components installation, painting and stud wall installation in the administration area is ongoing.

Two change orders have been signed by all parties on this contract. The net increase in contract price is $38,088, and the intermediate completion date was extended to December 16, 2016, and the substantial completion date extended to November 28, 2017. The milestone completion date is for completing all site piping and completing the backfill against the WTP structure foundation walls. The contractor did not complete the items for the intermediate completion. The intent of the milestone completion date was to allow for some secondary settlement prior to the installation of paving. In order to meet the intent of the milestone completion date, the contractor was asked to complete the remaining areas of backfill at least 100 days prior to placement of paving. With regards to remaining pipeline installation that are under areas with paving, the contractor was instructed to use trench backfill material classified as fill or structural fill. A certificate of milestone completion was signed by all parties with the contractor agreeing to the above conditions.

The Electrical contractor, Edling Electric, Inc., and the Mechanical contractor, Williams Plumbing and Heating, Inc., are following the General contractor in their work. The Electrical contractor is continuing to install power, lighting and fire alarm conduits in the basement. The Mechanical contractor is working on HVAC duct installation, fire sprinkler pipe, waste, water and vent installation in the basement. One change order which increased the contract price by $46,272.62 has been signed by all parties for the Mechanical contract.

Contract 3-2E Residual Handling Building at Dickinson WTP:

Bid ready documents for this contract are mostly complete. This contract will be ready for advertising for bids in a month.

Contract 4-1F/4-2C Generator Upgrades:

The scope of this contract includes relocating the existing 1000 kW generator at the Dodge pump station to the Dickinson Finished Water Pump Station and installing a new standby engine generator at the Dodge pump station. This contract also includes relocating the existing 1,500 kW generator at the Richardton Pump Station to the intake booster pump station and installing a new generator at the Richardton Pump Station. Bids for this contract were opened on January 28, 2016, and the contract was awarded to Edling Electric, Inc. at the March 3, 2016 meeting. The preconstruction conference for this contract was held on May 19, 2016.

The contract is substantially complete. A final punch list will be developed soon. Once the final punch list items and the administrative items are complete, the contract will be closed out.

Contract 5-1A and 5-2A 2nd Richardton Reservoir and 2nd Dickinson Reservoir:
The SWC, at its October 12, 2016 meeting, awarded Contract 5-2A, 2nd Dickinson Reservoir, to John T. Jones Construction Company. Preconstruction conference for this contract was held on March 30, 2017. The earthwork excavation for the reservoir is complete and the inlet and outlet piping installation is complete. The contractor is currently installing the perimeter drain, drain rock at the reservoir base and installing the reinforcing steel for reservoir wall footing.

The SWC at its December 9, 2016 meeting awarded Contract 5-1A, 2nd Richardton Reservoir, to Engineering America, Inc. A preconstruction conference for this contract is currently scheduled for May 31, 2017.

Contract 2-1B Raw Water Line Capacity Upgrade from intake to OMND WTP:
This contract is currently advertised for bids with a bid opening date of June 8, 2017.

Transfer of Service Agreements:
At the December 12, 2015 SWC meeting, the Commission approved the Transfer of Service agreement between City of Killdeer, SWA and SWC. This was the first annexation agreement negotiated between a City served by Southwest Pipeline Project and SWA. In early January 2016, SWA mailed similar agreements to 33 communities within the SWPP service area except for City of Dickinson using the same template as used for City of Killdeer. SWA has been negotiating different terms with the City of Dickinson, but now City of Dickinson is agreeable to the same terms as the other communities. Some communities executed the agreement, while many communities expressed concerns about terms of the annexation agreement that was mailed to them. SWA continues to meet with the communities to negotiate the terms. Twenty-six communities out of the total 35 communities have executed the agreement.

GE:SSP:pdh/1736-99

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Agenda (2)

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission

FROM: Garland Erbele, P.E., Chief Engineer - Secretary

SUBJECT: SWPP Contract 2-1B – Raw Water Transmission line from Intake to OMND Water Treatment Plant

DATE: May 25, 2017

The scope of work for Contract 2-1B generally consists of furnishing and installing 19,026 lineal feet of 30" diameter ID steel pipeline, 304 lineal feet of 48" diameter jacked steel casing at three (3) locations, ten (10) combination air-vacuum valve manholes, ten (10) blowoff assembly manholes, repair of four (4) existing blowoff manhole assemblies, four (4) 30" plug valves, two (2) connections to existing 30" diameter welded steel pipelines, pressure testing, and pipeline reclamation for the raw water main transmission pipeline upgrades as required by the Contract Documents and General Requirements.

The Substantial Completion Date of the contract is August 31, 2018.

Bids for Contract 2-1B will be opened on June 8, 2017. The Engineer's estimate for this contract is $10.1 Million and the estimated Project cost is $12.625 Million.

A summary of bids received and a recommendation to award this contract will be provided at the meeting.

GE:SSP:pdh/1736-99

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Agenda M

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele P.E., Chief Engineer – Secretary
SUBJECT: Devils Lake Hydrologic and Outlet Updates
DATE: May 30, 2017

Hydrologic Update

The May 30 Devils Lake water surface elevation is 1451.5 feet. Below average precipitation through the late winter and spring led to a lake level rise of approximately 1.6 feet; much less than the 3 to 4 foot rise that was predicted early in the year.

2017 precipitation has averaged between 50 percent and 75 percent of normal throughout the basin, and the long-range forecast shows no strong signal toward either wet or dry conditions through the summer. Additional precipitation may cause the lake to rise slightly from the current elevation but evaporation and discharge will hopefully exceed inflows from summer rainfall. In late June, the National Weather Service will be releasing the non-exceedance probabilities for how much the lake may be drawn down by the end of the operating season.

Outlet Update

The Devils Lake Outlets began discharging on May 4th (East) and May 8th (West). Combined outlet discharge was 17,724 acre-feet in May with an average discharge rate of 350 cfs after May 8th. Winter maintenance was completed before startup, and both outlets have been performing steadily with no major operational difficulties. Early observations are that the modifications to the West Outlet standpipes appear to be successful in their purpose of keeping the foam suppressed, however, the overall success won't be clear until later in the year when rising water temperatures cause the foam to develop more steadily.

The Josephine number 2 motor (50 cfs) was refurbished and is scheduled for return the week of June 5th. With the return of the motor, the West Outlet will be back to 250 cfs discharge capacity. The return was delayed by one motor component that was unavailable until late May.

Devils Lake Outlet Management Advisory Committee

The Devils Lake Outlet Management Advisory Committee met on May 4th in Carrington, North Dakota. The meeting provided an opportunity for all outlet related concerns and questions to be addressed. In particular, concerns of downstream water quality and quantity were discussed with a general approval of how the outlets were operated in 2016. Also discussed was a long-term goal of drawing the lake down to 1448 feet before operating parameters are re-evaluated by the Committee. Meeting minutes and the 2017 PowerPoint presentation are available on the State Water Commission website under Basins/Devils Lake/Outlets/Tolna Structure.

GE:JK:TD:ph/416-10

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Agenda N

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer-Secretary
SUBJECT: Missouri River Update
DATE: May 30, 2017

System/Reservoir Status

System volume on May 30 in the six mainstem reservoirs was 60.3 million acre-feet (MAF), 4.2 MAF above the base of flood control. This is 3.6 MAF above the average system volume for the end of May and 1.1 MAF more than last year. The volume of water in the system on May 30, 2011 was 70.1 MAF.

On May 30, Lake Sakakawea was at an elevation of 1843.1 feet, 5.6 feet above the base of flood control. This is 3.6 feet higher than a year ago and 8.4 feet above its average end of May elevation. The minimum end of May elevation was 1808.8 feet in 2005, and the maximum end of May elevation was 1853.3 feet in 2011.

On May 30, the elevation of Lake Oahe was 1609.7 feet, 2.2 feet above the base of flood control. This is 1.7 feet lower than a year ago and 4.4 feet higher than the average end of May elevation. The minimum end of May elevation was 1576.5 feet in 2005, and the maximum end of May elevation was 1618.8 feet in 2011.

On May 30, the elevation of Fort Peck was 2238.9 feet, which is 4.9 feet above the base of flood control. This is 3.0 feet higher than a year ago and 8.4 feet higher than the average end of May elevation. The minimum end of May elevation was 2199.6 feet in 2005, and the maximum end of May elevation was 2248.9 feet in 2011.

Runoff and Reservoir Forecasts

Mountain snowpack peaked in early May and is currently melting. On May 29, mountain snowpack in the "Above Fort Peck" reach was 111 percent of average. In the "Fort Peck to Garrison" reach it was 169 percent of average.

The U.S. Army Corps of Engineers' (Corps) latest 2017 runoff forecast predicts annual runoff above Sioux City to be 29.7 MAF or 117 percent of average. Releases from Garrison Dam are currently at 35,000 cfs and the Corps' most recent reservoir forecast shows that releases will

remain that high through August. Lake Sakakawea is forecasted to peak at about elevation 1848.0 feet in July (2.0 feet below the base of the Exclusive Flood Control Zone).

Missouri River Recovery Implementation Committee (MRRIC)

Section 5018 of the 2007 Water Resources Development Act (WRDA) authorized the Missouri River Recovery Implementation Committee (MRRIC). The Committee is to make recommendations and provide guidance on activities of the Missouri River Recovery Program (MRRP). MRRIC has nearly 70 members representing local, state, tribal, and federal interests throughout the Missouri River Basin. The representatives for the State of ND on MRRIC are John Paczkowski (primary) and Laura Ackerman (alternate).

The comment period for the Corps' *Missouri River Recovery Management Plan and Environmental Impact Statement* (MRRMP-EIS) ended on April 24. The MRRMP-EIS evaluates a range of alternatives for the purposes of avoiding jeopardy to species on the Missouri River protected under the Endangered Species Act, specifically the threatened piping plover and endangered least tern and pallid sturgeon.

The Preferred Alternative (PA), as identified in the MRRMP-EIS, includes mechanical construction of habitat for the piping plover, least tern, and pallid sturgeon. In North Dakota, this would include the construction of new or maintenance of existing Emergent Sandbar Habitat (ESH) on the Garrison Reach. The PA also includes a one-time flow test for the pallid sturgeon spawning cue if naturally high flow does not occur on the Missouri River within about the next ten years. This one-time flow test would require a deviation from or change in the Master Manual.

Comments were coordinated between the ND State Water Commission, ND Game and Fish Department, ND Department of Health, ND Department of Agriculture, and State Historical Society of ND. The main point of the comments was that the state tentatively supports the PA under the following conditions:

(1) Reconvene consultation with the North Dakota Interagency ESH Team on annual activities related to the Missouri River Recovery Program;
(2) The final EIS and Record of Decision (ROD) state that any flow modifications outside the bounds of the current *Missouri River Mainstem Reservoir System Master Water Control Manual* (Master Manual) would require the preparation of an additional EIS, including consultation with affected states; and
(3) The final EIS commits the USACE to obeying all applicable state laws, permit and regulatory requirements, and policies.

Water Supply Rule

The Corps extended the comment period, for the second time, to August 18 for their proposed Water Supply Rule. The proposed rule pertains to the use of Corps reservoirs for domestic, municipal, and industrial water supply. It attempts to define how the Corps would require users to enter into storage contracts and be charged for the use of water for those purposes. The state submitted comments that primarily center around the issue that the proposed rule is fundamentally flawed because of the Corps' misunderstanding of state versus federal jurisdictions with respect to water appropriation and western water law, and its interpretation of the 1944 Flood Control Act. The proposed rule does not recognize states' rights to allocate water and interferes with states' sovereign rights.

GE:LCA:pdh/1392

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Agenda C

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer-Secretary
SUBJECT: NAWS – Project Update
DATE: May 30, 2017

Manitoba & Missouri Lawsuit

Injunction relief motion and appeal:
Oral arguments were held January 13, 2017 in front of circuit judges Brown and Wilkins and senior circuit judge Edwards. The decision was filed by circuit judge Brown March 3, 2017 remanding the decision to Judge Collyer with instruction to grant the modification to the injunction. The mandate was issued to the District Court April 10, 2017 and the District Court vacated the minute order from June 14, 2016 and granted the injunctive relief motion on April 11, 2017.

Summary judgement:
Oral argument for the cross-motions for summary judgement was held March 30, 2017, in DC District Court. A transcript of the hearing is available upon request. Judge Collyer said she would 'try to decide this as quickly as possible.' The Court issued a minute order April 3, 2017 requesting consent from the Federal Defendants and the State of North Dakota to including a representative from the Province of Manitoba on the adaptive management team as the Court perceives this as an issue before it. Responses were filed April 14, 2017.

Biota Water Treatment Plant Design

A pre-design meeting for the Biota WTP has held May 23, 2017 at Reclamation's office in Bismarck with the intent of establishing the guidelines for the design to ensure compliance with the Final SEIS and ROD, determining federal/project cost responsibilities, and establishing the design team constituency. The Dakota Water Resource Act of 2000 makes compliance with the Boundary Waters Treaty Act a federal responsibility. Reclamation had indicated that after the preferred alternative changed from UV and Chlorine in the Draft SEIS to conventional treatment in the Final SEIS that the federal responsibility was limited to the UV and Chlorination as the sedimentation and filtration processes were to address safe drinking water act compliance and not treaty compliance. Reclamation is now indicating that the entire facility will be a federal responsibility, potentially saving $15-$30 million in local resources.

Sundre Aquifer Supply Pipeline

This project is broken up into two contracts; one for the pipeline and one for the pumping and storage facilities. A preconstruction conference was held for the pipeline in Minot on May 24, 2017, and bids were opened May 26, 2017 for the pumping and storage facilities.

GE:TJF:pdh/237-04

North Dakota State Water Commission

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Agenda P

MEMORANDUM

TO: Governor Doug Burgum
Members of the State Water Commission
FROM: Garland Erbele, P.E., Chief Engineer/Secretary
SUBJECT: NDSWC Cost-Share – Flood Protection Property Acquisition
DATE: June 1, 2017

Several communities receiving cost-share for their permanent flood protection projects require purchase of real property. The cost-share policy states "The State Water Commission values and relies on local sponsors and their participation to assure on-the-ground support for projects and prudent expenditure of funding for evaluations and project construction." The property acquisition purchases are based on adjusted assessed value, market value appraisal, or negotiated value. The typical acquisition methods are based on the federal government's Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA).

The URA, passed by Congress in 1970, is a federal law that establishes minimum standards for federally funded programs and projects that require the acquisition of real property (real estate) or displace persons from their homes, businesses, or farms. The URA's protections and assistance apply to the acquisition, rehabilitation, or demolition of real property for federal or federally funded projects. The basic for real property acquisition guidelines are listed.

- Appraise property before negotiations
- Invite the property owner to accompany the appraiser during the property inspection
- Provide the owner with a written offer of just compensation and a summary of what is being acquired
- Pay for property before possession
- Reimburse expenses resulting from the transfer of title such as recording fees, prepaid real estate taxes, or other expenses.

In the case of voluntary acquisitions, under URA, there is nothing in the regulations to preclude negotiations resulting in agreements at, above, or even below the estimate of market value after the property owner has been so informed and all applicable requirements have been satisfied.

Attached are tables showing flood protection projects property values and purchased price for Burlington, Fargo, Lisbon, Minot, Sawyer, Valley City, and Ward County.

GE:JM:ph/1753
Attachments

Burlington Floodway Acquisition

June 1, 2017

No.	Property Address	Assessed Value	Purchase Price
1	1 Cherry Street	$ 180,600	$ 141,094
2	2 Cherry Street	223,400	222,959
3	3 Cherry Street	162,600	127,031
4	5 Cherry Street	125,000	37,256
5	7 Cherry Street	69,600	37,256
6	9 Cherry Street	75,600	76,253
7	11 Cherry Street	151,600	118,438
8	15 Cherry Street	194,600	152,031
9	16 Cherry Street	194,000	147,188
10	811 Colton Ave	132,000	91,430
11	827 Colton Ave	124,600	37,256
12	Hacienda Acres 3rd Addition ,	35,800	56,100
		Total	$ 1,244,290

Fargo-Moorhead Metropolitan Area Flood Risk Management Project
June 1, 2017

No.	PROPERTY ADDRESS	110% of Assessed Value	Appraised Value	Purchase Price
1	4633 Riverwood Drive N	$ 47,960	$ -	$ 109,990
2	1201 49th Avenue South		180,000	178,502
3	1121 49th Avenue South		245,000	245,708
4	3632 River Drive South		435,000	435,052
5	1342 South River Road		230,000	189,127
6	1135 49th Avenue South		210,000	213,534
7	3626 River Drive South		285,000	289,008
8	1141 49th Avenue South		228,000	228,690
9	3610 River Drive South		305,000	303,103
10	4477 Riverwood Drive North	54,670		73,083
11	201 Lindenwood Drive South		370,000	390,828
12	42 North Terrace	87,230		92,275
13	44 North Terrace	97,790		68,343
14	510 Southwood Drive South		370,000	367,852
15	503 Southwood Drive South		700,000	699,661
16	49 South Terrace		75,000	74,819
17	41 South Terrace		95,000	93,174
18	618 Southwood Drive		430,000	430,574
19	814 Southwood Drive		400,000	402,969
20	135 South Terrace		120,000	101,603
21	1522 South River Road		155,000	153,064
22	1334 South River Road		235,000	233,417
23	3618 River Dr. S		540,000	540,144
24	701 Harwood Dr. S		1,100,000	1,150,523
25	3602 River Drive South		325,000	341,570
26	2130 Sterling Rose Lane		685,000	692,153
27	233 Lindenwood Dr. S		195,000	233,518
28	1 11th Ave. N	198,110		217,234
29	517 Southwood		280,000	289,589
30	1037 Oak St. N	93,720		130,342
31	4332 Timberline Dr. S		645,000	651,275
X	4332 Timberline Dr. S			(452,993)
32	723 North River Rd		89,000	96,347
33	17 South Terrace N		152,000	155,018
34	810 Southwood Drive		290,000	292,033
35	33-35 South Terrace N		130,000	134,999
36	1330 South River Road		190,000	208,724
37	1141 48th Avenue		200,000	199,722
38	23 South Terrace North		164,000	170,258
39	706 Southwood Drive		450,000	452,775
40	31 South Terrace North		153,000	161,536

Fargo-Moorhead Metropolitan Area Flood Risk Management Project
June 1, 2017

No.	PROPERTY ADDRESS	110% of Assessed Value	Appraised Value	Purchase Price
41	718 Southwood Drive		300,000	306,718
42	37 South Terrace North		164,000	176,532
43	806 Southwood Drive S		300,000	312,729
44	4602 Rose Creek Parkway S		705,000	718,473
45	432 12th Avenue South		80,000	93,798
46	434 12th Avenue South		108,500	109,422
47	4603 Rose Creek Parkway		510,000	508,505
48	5436 11th Street South		370,000	367,269
49	1100 55th Avenue South		325,000	334,927
50	5430 11th Street South		382,000	393,238
51	4609 Rose Creek Parkway S		410,000	473,627
52	3920 River Drive South		270,000	288,787
53	5442 11th Street South		335,000	337,602
54	1454 South River Road		200,000	203,213
55	1450 South River Road		165,000	170,619
56	1442 South River Road		250,000	266,208
57	509 Southwood Drive		410,000	446,441
58	3914 River Drive South		335,000	338,711
59	1430 South River Road		480,000	484,418
60	3926 River Drive South		315,000	330,630
61	1106 55th Avenue South		355,000	359,536
62	1112 55th Avenue South		365,000	378,424
63	1414 South River Road		320,000	337,709
64	1041 Oak Street North		107,000	109,290
65	1045 Oak Street North		109,000	112,398
66	2853 Lilac Lane		850,000	850,915
X	2853 Lilac Lane			(454,344)
67	2816 64th Avenue South		170,000	178,024
68	515 Southwood Drive		540,000	595,426
69	601 Harwood Drive South	623,810		626,498
70	619 Harwood Drive South	533,720		535,955
71	3006 64th Ave South	219,890		304,059
72	1130 55th Ave South	318,120		321,651
73	1136 55th Ave South	341,110		346,632
74	5437 12th St. South	326,480		333,558
X	5437 12th St. South			(234,509)
75	1118 55th Ave South	273,680		278,744
76	5424 11th St. South	366,630		373,869
77	5400 11th St. South	282,040		287,985
78	5418 11 St. S	386,650		390,528
79	1124 55th Ave S		290,000	292,835

Fargo-Moorhead Metropolitan Area Flood Risk Management Project
June 1, 2017

No.	PROPERTY ADDRESS	110% of Assessed Value	Appraised Value	Purchase Price
80	517 Harwood Drive	511,170		513,030
81	5412 11th St S	359,920		354,569
82	5406 11th St S	365,860		366,393
83	8308 River View Rd, Stanley Twp		330,000	350,000
84	501 Harwood Drive South	502,260		500,939
85	4469 S Oakcreek Drive	374,880		375,367
86	4461 Oakcreek Drive	438,130		437,857
87	4485 Oakcreek Drive S	462,220		460,828
88	4481 Oakcreek Drive S	375,760		375,577
89	4477 Oakcreek Drive S	504,900		503,812
90	4465 Oakcreek Drive S	487,410		486,691
91	4489 Oakcreek Drive S	496,100		494,775
92	437 Harwood Drive S	561,550		559,310
93	509 Harwood Drive S	492,800		498,240
94	1114 S 4th St	158,730		163,477
95	4453 Oakcreek Dr S	568,700		572,115
96	610 Hackberry Drive	563,420		564,334
97	321 10th Ave S	174,790		179,499
98	3656 River Drive S	297,550		301,651
99	3726 River Drive S	438,130		441,583
100	3644 River Drive S	438,020		441,217
101	3662 S River Drive	351,010		354,324
102	198 North Woodcrest Drive	324,720		328,264
103	3650 S River Drive	339,130		343,566
104	3532 River Drive S	425,480		428,785
105	4497 Oakcreek Drive S	451,550		445,496
106	3538 River Drive S	504,020		506,176
107	502 Harwood Drive S	531,960		533,941
108	179 South Woodcrest Drive N	425,480		428,085
109	160 North Woodcrest Drive N	360,470		363,341
110	3830 River Drive S	513,040		515,325
111	1436 South River Road	293,590		297,406
112	125 South Terrace N	145,090		149,545
113	3512 River Drive S	290,840		294,313
114	3720 River Drive S	778,690		778,408
115	3902 River Drive S	330,990		333,953
116	3506 River Drive S	426,250		428,591
117	192 North Woodcrest Drive	429,220		430,901
118	3518 River Drive S	321,640		324,300
119	3676 River Drive S	356,400		358,988
120	720 Hackberry Drive S	456,280		458,231

No.	PROPERTY ADDRESS	110% of Assessed Value	Appraised Value	Purchase Price
121	3638 River Drive S	320,870		323,803
122	3832 River Drive S	353,100		355,801
123	520 Hackberry Drive S	619,300		619,373
124	3702 River Drive S	297,990		301,187
125	3524 River Drive S	328,240		330,725
126	166 North Woodcrest Drive	345,290		346,875
127	333 Schnell Dr, Oxbow ND	88,000		104,088
128	3820 River Drive S	592,900		592,505
129	3674 River Drive S	407,440		409,055
130	3668 River Drive South	363,330		365,024
131	4120 S 15th Street	284,020		285,514
132	626 Hackberry Drive S	571,780		569,480
133	4128 17th St S	504,130		509,776
134	1408 South River Road	320,320		325,856
135	802 Hackberry Drive S	517,990		523,661
136	4127 S 17th St	534,600		540,019
137	1348 South River Road	425,370		430,882
138	4015 Copperfield Court South	460,680		466,025
139	204 North Woodcrest Drive	384,230		389,555
140	3227 39th Ave S	167,310		172,666
141	1124 4th St S	101,860		107,083
142	3415 39th Ave S	150,040		155,379
143	4457 Oakcreek Drive S	748,770		758,023
144	3838 River Drive S	300,300		305,625
145	3427 39th Ave S	151,800		170,199
146	3333 39th Ave S	151,030		156,272
147	3419 39th Ave S	143,660		151,183
148	3311 39th Ave S	156,970		162,144
149	3339 39th Ave S	159,830		166,856
150	3373 39th Ave S	159,060		163,759
151	3369 39th Ave S	159,060		164,748
152	3233 39th Ave S	155,100		162,445
153	3305 39th Ave S	150,590		155,678
154	3401 39th Ave S	161,810		166,890
155	3361 39th Ave S	154,110		159,230
156	3301 39th Ave S	156,970		162,010
157	3355 39th Ave S	155,650		160,567
158	3315 39th Ave S	152,900		157,896
159	3423 39th Ave S	138,160		143,183
160	702 Hackberry Drive South	513,810		517,686
161	3409 39th Ave S	157,850		162,018

No.	PROPERTY ADDRESS	110% of Assessed Value	Appraised Value	Purchase Price
162	3309 39th Ave S	156,310		151,605
163	3347 39th Ave S	167,310		171,787
164	3221 39th Ave S	209,400		213,891
165	3321 39th Ave S	151,690		156,045
166	602 Southwood Drive S	235,950		239,970
167	4493 Oakcreek Dr S	595,320		597,285
168	4473 Oakcreek Dr S	937,090		936,907
169	3808 River Drive S	342,210		345,439
170	345 Schnell Dr, Oxbow ND		481,100	478,703
171	1322 Elm St N, Fargo ND		350,000	347,270
172	3802 River Dr S	435,820		437,491
173	1118 4th St S	150,040	140,000	200,327
174	1326 Elm St N, Fargo ND		230,000	230,196
175	1341 N Oak St, Fargo ND		310,000	309,888
176	336 Schnell Dr, Oxbow ND		311,000	310,889
177	1330 Elm St N, Fargo ND		230,000	229,982
178	18 North Terrace N, Fargo ND		130,000	129,698
179	17495 52nd St SE, Hickson, ND		716,000	785,748
180	Pleasant Township, Babe's Addition Block 1 Lots 1,2, 3		2,048,700	2,698,227
181	1318 Elm Street N, Fargo ND		230,000	229,013
182	724 North River Road, Fargo ND		205,000	204,458
183	357 Schnell Drive, Oxbow, ND		469,400	466,721
184	1333 Oak Street N, Fargo, ND		240,000	238,513
185	349 Schnell Drive, Oxbow, ND		307,600	306,725
186	748 Riverbend Road, Oxbow ND		483,100	480,784
187	361 Schnell Drive, Oxbow ND		492,100	490,091
188	752 Riverbend Road, Oxbow ND		471,100	469,078
189	353 Schnell Drive, Oxbow ND		496,000	494,343
190	26 North Terrace N, Fargo ND		140,000	138,620
191	16 North Terrace N, Fargo ND		230,000	227,988
192	828 Riverbend Road, Oxbow ND		833,500	955,929
193	330 Schnell Drive, Oxbow ND		330,000	328,135
194	1314 Elm Street, Fargo ND		225,000	225,800
195	24 North Terrace N, Fargo ND		184,000	182,437
196	350 Schnell Dr, Oxbow ND		490,700	491,024
197	852 Riverbend Road, Oxbow ND		750,000	1,222,608
198	334 Schnell Drive, Oxbow ND		321,000	321,090
199	749 Riverbend Road, Oxbow ND		599,100	598,885
200	326 Schnell Drive, Oxbow, ND		327,000	326,842
201	1313 Elm Street, Fargo, ND		299,000	350,000
202	839 Riverbend Road, Oxbow ND		1,257,500	1,775,312

No.	PROPERTY ADDRESS	110% of Assessed Value	Appraised Value	Purchase Price
203	844 Riverbend Road, Oxbow ND		651,300	716,599
204	309 Schnell Dr, Oxbow ND		540,800	539,896
205	810 Riverbend Road, Oxbow ND		673,300	672,126
206	1421 42nd Ave S, Fargo ND		565,000	454,997
207	4117 15th St S & 4123 15th St S, Fargo ND		868,500	935,992
208	817 Riverbend Road, Oxbow ND		448,300	448,300
209	833 Riverbend Rd, Oxbow ND		804,100	801,672
210	328 Schnell Dr, Oxbow ND		321,800	320,804
211	4989 & 4985 Klitzke Dr, Oxbow ND		246,700	245,927
212	1510 South River Road, Fargo ND	325,050		328,898
213	332 Schnell Dr, Oxbow ND		330,000	328,639
214	1462 South River Road, Fargo ND	308,660		311,897
215	3732 River Drive S, Fargo ND		525,000	561,633
216	317 Schnell Drive, Oxbow ND		550,800	548,394
217	848 Riverbend Road, Oxbow ND		782,000	306,000
218	3714 River Drive S, Fargo ND		1,020,000	1,359,141
219	4009 Copperfield Court S, Fargo ND		665,000	666,503
220	329 Schnell Dr, Oxbow ND		552,500	549,277
221	321 Schnell Dr, Oxbow ND		464,800	462,335
222	843 Riverbend Road, Oxbow ND		985,000	700,000
223	813 Riverbend Road, Oxbow ND		664,100	660,998
224	3738 River Drive S, Fargo ND		500,000	500,664
225	325 Schnell Dr, Oxbow ND		405,800	403,499
226	341 Schnell Dr, Oxbow ND		484,200	480,922
227	840 Riverbend Rd, Oxbow ND		551,500	547,075
228	816 Riverbend Rd, Oxbow ND		571,400	567,413
229	821 Riverbend Rd, Oxbow ND		580,600	580,617
230	2351 173rd Ave SE, Argusville ND		215,000	215,031
231	805 Riverbend Rd, Oxbow ND		508,600	508,203
232	17471 49th St SE, Horace ND		780,000	883,581
233	17465 49th St SE, Horace ND		746,000	828,561
234	808 Riverbend Rd, Oxbow ND		714,400	713,815
235	338 Schnell Dr, Oxbow ND		561,000	560,402
			Total	**$ 91,809,477**

Fargo Interior Flood Acquisition
June 1, 2017

No.	Property Address	110% of Assessed Value	Purchase Price
1	3944 33rd St S	$ 180,070	$ 180,070
2	1518 South River Road	399,300	399,300
3	3938 33rd St S	152,240	152,240
4	3204 39th Ave S	191,620	191,620
5	3930 33rd St S	165,440	165,440
6	3942 33rd St S	179,850	179,850
7	3210 39th Ave S	189,640	189,420
8	3932 33rd St S	149,710	149,710
9	3936 33rd St S	149,490	149,490
10	3209 39th Ave S	191,840	191,840
11	3934 33rd St S	149,710	149,710
12	4525 Riverwood Drive N	60,280	78,364
13	3405 39th Ave S	173,910	173,910
14	3201 39th Ave S	207,900	207,900
		Total	$ 2,558,864

Property submitted under $60 million approved 2015-2017.

Lisbon Property Acquisitions
June 1, 2017

No.	Property Address	Assessed Value	Appraised Value	Purchase Price
1	3 Main St	$ 22,600	$ -	$ -
2	21 7th Ave E	59,000		78,100
3	708 Harris St	119,500		150,000
4	712 Harris St	38,400		50,600
5	107 1st Ave E	45,600		55,100
6	113 2nd Ave E	74,300		80,800
7	115 2nd Ave E	63,600		68,500
8	310 Rose St	33,600		38,700
9	108 1st Ave E	16,200		18,600
10	205 Valley St	31,200		34,800
11	207 Valley St	14,500		15,800
12	103 Valley St	400		7,050
13	9 Valley St	65,300		72,450
14	517 1/2 Main	31,500		34,700
15	113 2nd Ave E	15,100		22,000
16	12 Valley St	900		2,000
17	107 Valley St	17,600		2,000
18	508 Harris St	500		20,000
19	510 Harris St	400		10,600
20	606 Harris St	62,500	80,000	78,000
21	702 Harris St	83,800		19,867
22	706 Harris St	70,600		70,600
23	802 Harris St	90,700		-
24	805 Harris St	112,300		-
			Total	$ 930,267

Minot Floodway Acquisition
June 1, 2017

No.	Property Address	115% Assessed Value	Offer	Purchase Price
1	1213 5th Ave SW	$141,100	$162,265	$162,265
2	1217 5th Ave SW	154,000	177,100	177,100
3	1226 6th Ave SW	171,500	197,225	197,225
4	1208 6th Ave SW	114,800	132,710	132,710
5	1220 8th Ave SW	204,500	235,175	235,175
6	1229 6th Ave SW	234,700	269,905	269,905
7	1221 6th Ave SW	159,400	183,310	195,000
8	1217 6th Ave SW	163,700	188,255	190,000
9	301 3rd St NW	65,100	74,865	74,865
10	213 3rd St NW	79,000	90,850	90,850
11	209 3rd St NW	84,400	97,060	117,500
12	107 4th Ave NW	19,600	22,540	22,540
13	105 4th Ave NW	105,800	121,670	121,670
14	102 4th St NW	172,100	197,915	197,915
15	108 4th St NW	165,900	190,785	190,785
16	200 4th St NW	116,900	134,435	150,000
17	116 4th St NW	90,200	103,730	103,730
18	112 4th St NW	138,300	159,045	159,045
19	326 1st Ave NW	76,300	87,745	107,400
20	328 1st Ave NW	76,800	88,320	107,400
21	401 2nd St NE	140,200	161,230	161,230
22	109 4th Ave NE	54,300	62,445	62,445
23	400 1st St NE	129,300	148,695	192,600
24	408 1st St NE	64,000	73,600	73,600
25	11 4th Ave NE	68,400	78,660	78,660
26	401 Main St N	99,500	115,000	115,000
27	12 4th Ave NW	104,200	119,830	119,830
28	14.5 4th Ave NW	54,400	62,560	62,560
29	209 4th Ave NE	39,200	45,080	45,080
30	207 4th Ave NE	45,700	52,555	52,555
31	10 5th St NE	59,400	68,310	68,310
32	14 5th St NE	132,300	152,145	152,145
33	605 Central Ave E	107,500	123,625	123,625
34	601 Central Ave E	136,200	156,630	156,630
35	525 Central Ave E	75,900	87,285	87,285

Pre-flood assessed value plus 15%

Minot Floodway Acquisition
June 1, 2017

No.	Property Address	115% Assessed Value	Offer	Purchase Price
36	521 Central Ave E	$84,100	$96,715	$96,715
37	18 5th St NE	112,600	129,490	129,490
38	1212 3rd Ave SW	218,200	250,930	250,930
39	605 Forest Rd	203,000	233,450	233,450
40	609 Forest Rd	210,600	242,190	242,190
41	601 Forest Rd	175,300	201,595	201,595
42	519 Forest Rd	196,300	225,745	240,000
43	511 Forest Rd	201,000	231,150	231,150
44	507 Forest Rd	194,400	223,560	233,680
45	503 Forest Rd	213,900	245,985	245,985
46	501 Forest Rd	226,000	259,900	259,900
47	1404 4th Ave SW	188,400	216,660	216,660
48	1405 4th Ave SW	230,100	264,615	268,985
49	816 2nd Ave NE	72,600	83,490	123,360
50	1015 3rd Ave NE	58,100	66,815	66,815
51	409 15th St SE	209,300	240,695	240,695
52	413 15th St SE	181,800	209,070	209,070
53	417 15th St SE	186,600	214,590	214,590
54	421 15th St SE	184,200	211,830	211,830
55	425 15th St SE	186,400	214,360	214,360
56	429 15th St SE	189,200	217,580	217,580
57	433 15th St SE	170,800	196,420	224,480
58	441 15th St SE	179,800	206,770	222,800
59	437 15th St SE	186,600	214,590	214,590
60	115 15th St SE	83,400	95,910	95,910
61	201 15th St SE	159,300	183,195	183,195
62	207 15th St SE	99,700	114,655	114,655
63	1501 3rd Ave SE	101,100	116,265	116,265
64	1726 Burdick Ex E	116,100	133,515	133,515
65	1722 Burdick Ex E	80,600	92,690	92,690
66	1720 Burdick Ex E	49,000	47,150	47,150
67	1618 Burdick Ex E	70,700	81,305	81,305
68	1524 Burdick Ex E	106,200	122,130	122,130
69	1530 Burdick Ex E	62,300	71,645	71,645
70	1534 Burdick Ex E	115,600	132,940	132,940

Pre-flood assessed value plus 15%

Minot Floodway Acquisition
June 1, 2017

No.	Property Address	115% Assessed Value	Offer	Purchase Price
71	1614 Burdick Ex E	$128,900	$148,235	$148,235
72	1729 8th Ave SE	115,900	133,285	133,285
73	1723 8th Ave SE	165,000	189,750	189,750
74	17 Souris Ct	207,800	238,970	238,970
75	15 Souris Ct	211,100	242,765	242,765
76	13 Souris Ct	229,000	263,350	263,350
77	11 Souris Ct	179,400	206,310	206,310
78	1602 Burdick Expy E	76,400	87,860	87,860
79	1604 Burdick Expy E	43,700	50,255	50,255
80	1225 6th Ave SW	187,800	215,970	215,970
81	1224 8th Ave SW	168,400	193,660	193,660
82	1220 6th Ave SW	176,000	202,400	210,000
83	332 Walders St	100,500	115,575	115,575
			Totals	$13,052,920

Pre-flood assessed value plus 15%

Minot Floodway Acquisition
June 1, 2017

No.	Property Address	Assessed Value	Offer	Purchase Price
1	106 4th Ave NW	$ 19,300.00	$ 135,000.00	$ 135,000.00
2	2 5th St NW	33,900	113,900	121,000
3	505 West Central Ave	44,500	135,000	135,000
4	509 Central Ave W	69,000	153,000	153,000
5	1409 3rd Ave SW	97,000	213,000	241,000
6	216 Maple St	18,100	115,000	115,000
7	212 Maple St	27,200	108,000	108,000
8	202 Maple Street	25,000	120,000	120,000
9	112 5th St NW	27,800	115,000	115,000
10	419 2nd Ave NW	22,100	145,000	145,000
11	422 1st Ave NW	40,000	83,000	88,000
12	438 1st Ave NW	45,000	115,000	115,000
13	449 1st Ave NW	55,000	145,000	145,000
14	441 1st Ave NW	29,000	109,900	109,900
15	435 1st Ave NW	46,600	129,900	129,900
16	427 1st Ave NW	51,500	130,289	130,289
17	23 5th St NW	116,000	139,000	139,000
18	19 5th St NW	45,300	130,000	130,000
19	13 5th St NW	23,200	123,500	123,500
20	115 4th St NW	70,000	135,000	135,000
21	205 4th St NW	42,900	178,500	178,500
22	201 4th St NW	37,300	129,900	129,900
23	401 1st Ave NW	34,000	159,000	159,000
24	6 1/2 6th St NW	25,900	100,000	100,000
25	6 6th St NW	41,600	210,000	210,000
26	23 6th St SW	37,000	99,900	99,900
27	21 6th St SW	30,500	130,000	130,000
28	1 6th St NW	60,000	188,000	195,000
29	16 7th St SW	51,000	155,000	155,000
30	18 7th St SW	45,700	154,900	154,900
31	22 7th St SW	39,900	165,000	165,000
32	24 7th St SW	41,400	196,000	196,000
33	108 8th St SW	34,800	134,900	134,900
34	1510 5th Ave SW	84,400	198,000	198,000
35	716 & 800 Forest Rd	81,700	242,000	242,000
36	615 Forest Rd	101,000	229,900	229,900

Involuntary Buyouts based on Fair Market Value as of June 21, 2011.

Minot Floodway Acquisition
June 1, 2017

No.	Property Address	Assessed Value	Offer	Purchase Price
37	208 3rd St NW	$ 10,000	$ 70,000	$ 70,000
38	1200 3rd Ave SW	14,000	45,000	45,000
39	204 Maple St	64,000	16,000	40,000
40	226 Maple St	47,000	34,000	40,500
41	424 1st Ave NW	32,800	150,000	150,000
42	1409 3rd Ave SW Add Lot	20,000		City Park District
43	1718 Burdick Expressway East	53,000	138,900	138,900
44	220 Maple Street	21,000	18,500	18,500
45	202 3rd St NE	29,000	165,000	165,000
46	429 2nd Ave NW	98,000	124,500	124,500
47	300 & 304 6th St NE	23,000	187,500	187,500
48	311 and 313 10th St NE	25,000	125,000	125,000
49	25 5th St NE	72,100	106,000	106,000
50	801 2ND AVE NE	53,400	132,000	132,000
51	215 15TH ST SE	85,600	144,750	144,750
52	1223 5th Ave SW	68,700	165,500	165,500
			Total	$ 6,964,739

Involuntary Buyouts based on Fair Market Value as of June 21, 2011.

Minot Floodway Acquisition
June 1, 2017

No.	Property Address	Assessed Value	Offer	Purchase Price
1	412 2nd Ave NW	$ 32,200	$ 158,500	$ 158,500
2	712 Forest Road	198,400	232,500	232,500
3	111 4th Ave. NW	76,900	109,900	109,900
4	19 6th St SW	107,200	163,563	163,563
5	9 5th St NW	124,300	180,000	180,000
6	436 Central Ave W	90,800	110,000	110,000
7	401 1st St NE	86,900	135,000	135,000
8	614 Forest Rd	183,100	297,000	297,000
9	1206 6th Ave SW	223,500	235,000	235,000
10	7 5th St NW	127,400	140,900	140,900
11	103 5th St NW	134,000	180,000	180,000
12	203 4th Ave NE	63,900	113,900	113,900
13	415 1st Ave NW	163,400	180,000	180,000
14	30 7th St SW	164,000	200,000	200,000
15	804 & 802 Forest RD	293,300	262,000	262,000
16	405 Main St N	69,000	130,000	130,000
17	1 5th St SW	113,000	163,900	169,000
18	613 16th St SW	203,000	247,500	255,000
19	328 Walders St	174,000	205,000	205,000
20	10 6th St NW	161,000	197,000	197,000
21	407 1st St NE	107,100	133,000	133,000
22	12 6th St NW	199,000	265,000	265,000
23	708 Forest Rd	185,000	260,000	260,000
24	100 4th Ave NW	182,000	292,000	292,000
25	448 1st Ave NW	103,000	165,000	165,000
26	438 Central ave w	19,000	8,940	8,940
27	409 2nd St NE	187,000	182,500	182,500
28	425 2nd Ave NW	28,000	19,900	19,900
29	105 4th St NW	45,000	20,000	45,000
30	416 1st Ave NW	24,000	17,000	24,000
31	302 Maple Street	75,000	103,000	103,000
32	105 5th St NW	122,000	183,135	183,135
33	109 5th St NW	28,000	38,000	45,000
34	442 1st Ave NW	61,000	40,000	68,000
35	412 1st Ave NW	96,000	120,000	120,000
36	402 1st St NW	44,000	40,000	40,000
37	540 Central Ave W Unit 1	203,000	250,000	250,000
38	436 1st Ave NW	83,000	90,000	90,000

Assessments and fair market value not on the same timeline.

Minot Floodway Acquisition
June 1, 2017

No.	Property Address	Assessed Value	Offer	Purchase Price
39	806 2nd Ave NE	$ 23,000	$ 25,000	$ 25,000
40	433 2nd Ave NW	208,000	225,000	250,000
41	300 Maple Street	107,000	90,000	98,500
42	15 6th St NW	116,000	130,000	170,000
43	11 6th St NW	54,000	147,000	156,000
44	820 2nd Ave NE	25,000	22,500	25,000
45	1405 4th Ave SW	-	30,000	36,000
46	7 6th St NW	156,000	180,000	180,000
47	1030 5th Ave SW	625,000	860,000	1,025,000
48	1200 5th Ave SW	207,000	260,000	260,000
49	202 1/2 & 208 Maple St	160,000	170,000	170,000
50	5 6th St SW	104,000	180,000	186,200
51	501 Central Ave W	40,000	17,500	40,000
52	Parking lot next to Home Sweet	-	7,000	12,000
53	803 2nd Ave SW	165,000	200,000	200,000
54	522 1st Ave NE	250,000	176,000	240,000
55	2402 El Rio Dr	213,000	220,000	220,000
56	406 2ND ST NE	152,000	230,000	230,000
57	210 5TH AVE NE	100,000	125,000	125,000
58	224 Maple St	98,000	145,000	157,500
59	445 1st AVE NW	115,000	155,000	162,200
60	418 2nd St NE	190,000	270,000	270,000
61	127 15th St SE	38,000	175,500	175,500
62	417 2nd Ave NW	111,000	145,000	145,000
63	1400 & 1404 3rd Ave SW	314,000	361,000	361,000
64	1434 1st Ave SE	115,000	142,000	150,000
65	605 2ND AVE NE	81,000	127,000	127,000
66	425 5th Ave NE	56,000	64,500	64,500
67	1209 5th Ave SW	248,000	293,000	293,000
68	309 3RD ST NW	197,000	300,000	315,000
69	511 1st Ave NW	815,000	810,000	870,000
70	515 Central Ave E	18,000	25,000	25,000
71	11 5th St NW	48,000	27,000	30,000
72	422 2nd St NE	131,000	177,000	177,000
73	413 2nd Ave NW	250,000	280,000	300,000
74	7 6th St SW	138,000	172,000	187,000
75	9 6th St SW	122,000	163,500	180,000
76	509 1/2 Central Ave W	33,000	48,000	55,000

Assessments and fair market value not on the same timeline.

Minot Floodway Acquisition
June 1, 2017

No.	Property Address	Assessed Value	Offer	Purchase Price
77	1401 3rd Ave SW	$ 257,000	$ 285,000	$ 305,000
78	1601 7th Ave SW	271,000	301,000	301,000
79	606 Forest Road	228,000	240,000	270,000
80	1212 8th Ave SW	44,000	56,750	56,750
81	1304 3rd Ave SW	307,000	355,000	355,000
82	121 15th St SE	151,000	172,000	172,000
83	412 2nd ST NE	156,000	230,000	230,000
84	1213 6th Ave SW	226,000	255,000	255,000
85	501 3rd St NE	496,000	820,000	820,000
86	310 6TH ST NE	23,000	45,000	50,000
87	619 2ND AVE NE	12,000	20,000	25,000
88	110 6TH ST NE	45,000	52,000	52,000
89	102 8th St SW	40,000	79,000	114,000
90	1 6th ST SW	431,000	550,000	550,000
91	500 12th St SW	203,000	250,000	250,000
92	610 Forest Road	300,000	333,000	363,000
93	1800 Burdick EXPY W	184,000	196,000	196,000
94	111 4th St NW	167,000	207,000	207,000
95	1111 5th Ave SW	121,000	224,900	224,900
96	Vacant lots	102,000	267,000	330,000
97	615 12TH ST SW	202,000	225,000	225,000
98	2317 El Rio Drive	270,000	300,000	300,000
99	2401 El Rio Drive	207,000	231,300	231,300
100	1115 5TH AVE SW	191,000	220,000	220,000
101	1039 5TH AVE SW	105,000	142,000	142,000
102	1035 5th Ave SW	114,000	121,000	121,000
103	324 1st Ave NW	109,000	145,000	145,000
104	332 1st Ave NW	152,000	150,000	155,000
105	UNPLATTED SEC 27-155-83	40,000	44,000	49,500
106	1200 28TH ST SW & Additional	215,000	255,000	255,000
107	2800 28th Street SW	10,000	16,500	16,500
108	1313 27TH ST SW	365,000	400,000	440,000
109	211 4th Ave NE	52,000	50,000	56,300
110	306 Maple Street	143,000	150,000	178,000
111	701 12TH ST SW	145,000	156,000	156,000
112	1121 5th Ave SW	155,000	163,000	163,000
			Total	$ 21,622,388

Assessments and fair market value not on the same timeline.

Sawyer Floodway Acquisition

June 1, 2017

No.	Property Address	115% 2011 Assessed Value	Purchase Price
1	502 N Dakota Ave	$52,670	$50,248
		Totals	$0

Valley City Floodway Acquisition
June 1, 2017

No.	Property Address	110% Assessed Value	Appraisal Value	Purchase Price
1	260 College St SW	$ 35,640	$ 68,000	$ 68,000
2	280 College St SW	58,190	127,000	127,000
3	286 College St SW	47,740	56,000	56,000
4	302 College St SW	34,870		34,870
5	330 College St SW	375,760	670,000	670,000
6	344 College St SW	7,700	11,000	11,000
7	225 College St SE	40,700		40,700
8	239 College St SE	26,070		26,070
9	257 College St SE	42,680	56,000	56,000
10	265 College St SE	53,240		53,240
11	239 4th St, SW	21,780		21,780
12	225 4th St, SW	54,670		54,670
13	232 4th St, SE	15,400		15,400
14	242 4th St, SE	35,970		35,970
15	408 3rd Ave, SE	40,370		40,370
16	304 4th St, SE	20,680	45,000	45,000
17	320 4th St, SE	19,360	50,000	50,000
18	328 4th St, SE	25,740	40,000	40,000
19	338 4th St, SE	64,020	79,000	79,000
20	346 4th St, SE	11,770	24,000	24,000
21	460 8th Ave, NE	70,070		70,070
22	352 4th St, SE	18,150	33,500	33,500
23	362 4th St, SE	36,410	62,000	62,000
24	1440 Chautauqua Blvd	122,540		122,540
25	1450 Chautauqua Blvd	194,810	231,000	231,000
26	1454 Chautauqua Blvd	191,620	200,000	200,000
27	856 6th St, NE	16,280		21,780
28	856 6th St, NE	9,460		9,460
29	411 West Main	133,320		133,320
30	404 5 Ave SW	53,240		53,240
31	422 5th Ave SW	8,360		8,360
32	440 5th Ave SW	4,510		4,510
33	542 5th Ave SW	67,100	81,000	81,000
34	454 5th Ave SW	98,780	217,000	217,000
35	492 5th Ave SW	63,470	142,000	142,000
36	667 5th Ave SW	42,460	130,000	130,000
37	524 5th Ave SW	36,630		36,630
38	480 5th Ave SW	46,310	145,000	145,000
39	504 5th Ave SW	36,410	98,000	98,000
40	512 5th Ave SW	44,550	129,000	129,000

Valley City Floodway Acquisition
June 1, 2017

No.	Property Address	110% Assessed Value	Appraisal Value	Purchase Price
41	497 6th St SW	10,230		10,230
42	468 Viking Drive	42,020		42,020
43	659 5th Ave SW	33,440	76,500	76,500
44	496 6th St SW	76,340	130,000	130,000
45	651 5th Ave SW	29,700	77,000	77,000
46	534 5th Ave SW	49,170		49,170
47	492 6th St SW	33,220	133,500	133,000
48	746 Main Street E	47,410		
49	136 8th Ave SE	2,310		
50	Vacant lot	330		
51	127 8th Ave SE	20,790		127,500
52	804 Main St E	15,620		
53	740 Main St E	7,590		
54	474 5th Ave SW	38,170	89,000	115,000
55	704 Main St E	20,020		20,020
56	147 5th Ave SW	42,900		42,900
57	348 9th Ave NE	102,630	175,500	175,500
58	360 9th Ave NE	95,810	171,000	171,000
59	737 6th Ave SW	48,290		48,290
60	310 9th Ave NE	85,910	166,000	166,000
61	725 6th Ave SW	38,720		38,720
62	336 9th Ave NE	89,100	163,000	163,000
63	460 3rd St SE	29,040	53,000	53,000
64	519 8th Ave NE	70,400	144,000	144,000
65	606 East Main	44,660	97,000	97,000
66	322 9th Ave NE	82,500	157,000	157,000
67	847 2nd St NE	65,890	117,000	117,000
68	137 5th Ave SW	87,890	114,000	114,000
69	890 Main St E	40,370	125,000	125,000
70	538 Main St E	51,700	125,000	125,000
71	558 Main St E	73,480	180,000	180,000
72	512 Main St E	131,010		
73	494 Main St E	32,780	160,000	160,000
74	201 4th St SW	255,640	305,000	330,000
75	205 4th St SW	285,010	325,000	325,000
76	259 4th St SW	688,380	1,025,000	1,025,000
77	Lots 19-21 2&2nd SW	275,000	290,000	290,000
			Total	8,305,330

Ward County Floodway Acquisition
June 1, 2017

No.	Property Address	115% of 2010 Assessed	Duplication of Benefits	Purchased Price
1	1400 66th St NW	$ 301,070	$ 11,321	$ 289,749
2	1411 66th St NW	525,320		525,320
3	1420 66th St NW	238,970	28,363	210,607
4	1511 69th St NW	217,580	22,464	195,116
5	1521 69th St NW	257,140		257,140
6	1601 69th St NW	311,420		311,420
7	1611 69th St NW	342,470	15,673	326,797
8	1615 27th St SE	850,000	250,141	599,859
9	1621 69 St NW (Olt 13)	27,370		27,370
10	1621 69th St NW	244,950	23,876	221,074
11	1701 69th Street NW	346,035	24,924	321,111
12	2216 73rd St NW	158,930	27,129	131,801
13	2300 75th St NW	217,580	27,078	190,502
14	2310 75th St NW	170,200	28,363	141,837
15	2311 75th St NW	168,130	27,940	140,190
16	2321 75th St NW	160,000	27,278	132,722
17	2401 75th St NW	219,000	27,078	191,922
18	2421 75th St NW	197,030	28,020	169,010
19	2501 75th St NW	144,670		144,670
20	2521 75th St NW	171,350	25,452	145,898
21	2601 75th St NW	235,000	24,640	210,360
22	2621 75th St NW	191,820	16,064	175,756
23	2701 75th St NW	235,000	25,231	209,769
24	3210 54th St SE	213,785		213,785
25	3230 54th St SE	209,760	28,363	181,397
26	4100 River Rd Burlington	177,790	28,363	149,427
27	4120 River Rd Burlington	175,260	28,363	146,897
28	5005 33 Ave SE	322,575	24,560	298,015
29	5115 33rd Ave SE	316,940	27,078	289,862
30	3 Outlots	44,045		44,045
31	620 37th St SW	452,985	22,635	430,350
32	6405 16 Ave NW	239,700	27,233	212,467
33	6411 16th Ave NW	289,800	27,078	262,722
34	6421 16th Ave NW	268,640	243,570	25,070
35	6441 16th Ave NW	460,000		460,000
36	6511 16 Ave NW (E1/2)	460,920	27,940	432,980

Ward County Floodway Acquisition
June 1, 2017

No.	Property Address	115% of 2010 Assessed	Duplication of Benefits	Purchased Price
37	6511 16 Ave NW (W1/2)	$ 17,020		$ 17,020
38	6521 16th Ave NW	421,015		421,015
39	6601 14th Ave NW	255,760	224,710	31,050
40	6611 14th Ave NW	387,920	24,426	363,494
41	6620 14th Ave NW	218,270	27,260	191,010
42	6700 14th Ave NW	210,680	26,538	184,142
43	6701 14th Avenue NW	268,640	181,675	86,965
44	6711 14th Ave NW	268,180	26,152	242,028
45	6800 14 Ave NW	425,500		425,500
46	6810 14th Ave NW	302,450	28,061	274,389
47	6811 14th Ave NW	297,160		297,160
48	6820 18th Ave NW	682,180		682,180
49	6821 14th Ave NW	188,830		188,830
50	700 37th St NW	377,890	248,431	129,459
51	720 37th St SW	392,000	322	391,678
52	801 36th St SW	280,000	24,974	255,026
53	LD of Por olt 2 SE ls N10'	4,945		4,945
54	Olt 30 SWNE less SE 100'	6,095		6,095
55	Olt 46 NESE SENE	5,290		5,290
56	Olt 9 of SWSE	1,600		1,600
57	Robinwood Estates Lot 19	36,000		36,000
58	Tierrecita Vallejo 1st SD L 20	19,435		19,435
59	SWNE NE of River Less Por Olts 52 & 85, Olts, Rd & Benno AC	15,000		15,000
60	4301 River Road, Burlington	229,540	27,940	201,600
61	1500 66th St NW	266,340		266,340
62	SE 55' of Olt 31	160,000		160,000
63	Extra Lot - Outlot 12	1,495		1,495
64	5405 33rd Ave SE	530,300	647	529,653
65	2221 75th St NW	225,630		225,630
			Total	$ 14,071,045